

# VOCATIONAL TRAINING PROGRAM COMMERCIAL AND RESIDENTIAL PAINTING (DVS 5836)

Training Sector: Buildings and Public Works





# VOCATIONAL TRAINING PROGRAM COMMERCIAL AND RESIDENTIAL PAINTING (DVS 5836)

Training Sector: Buildings and Public Works



# Development Team

## Coordination

*Manon Chiasson*

Coordinator of the Buildings and Public Works sector  
Direction de la formation professionnelle  
Ministère de l'Éducation, du Loisir et du Sport

## Design and Development

*Diane Barrette*

Groupe Vision Compétence  
Services-conseils en éducation

*Normand Gratton*

Commercial and Residential Painting teacher  
École des métiers de la construction de Montréal  
Commission scolaire de Montréal

*Mario Labrecque*

Commercial and Residential Painting teacher  
École des métiers de la construction de Montréal  
Commission scolaire de Montréal

**Original French title :** *Programme d'études, Peinture en bâtiment (DEP 5336)*

## English Version

Direction des services à la communauté anglophone—  
Services langagiers  
Ministère de l'Éducation, du Loisir et du Sport

© Gouvernement du Québec  
Ministère de l'Éducation, du Loisir et du Sport, 2015

ISBN 978-2-550-71613-6 (Print version)  
ISBN 978-2-550-71614-3 (PDF)

ISBN 978-2-550-71412-5 (French version, PDF)  
ISBN 978-2-550-71411-8 (French version, Print)

Legal Deposit – Bibliothèque et Archives nationales du Québec, 2015

# Acknowledgments

The Ministère de l'Éducation, du Loisir et du Sport would like to thank the many people working in the field and in the education community who participated in the development of this vocational training program, in particular the following individuals.

## Representatives Employed in Education

---

*Alain Doiron*  
Teacher  
École des métiers de la construction de Montréal  
Commission scolaire de Montréal

*Gilles Poulin*  
Teacher  
Centre de formation professionnelle Jonquière  
Commission scolaire De La Jonquière

*Richard Racine*  
Teacher  
École des métiers et occupations de l'industrie de la construction  
de Québec  
Commission scolaire de la Capitale

*Pierrette Renaud*  
Teacher  
École des métiers de la construction de Montréal  
Commission scolaire de Montréal

*Lorraine Vadnais*  
Education consultant  
École des métiers de la construction de Montréal  
Commission scolaire de Montréal

## Representatives Employed in the Field

---

*Patrick Chagnon*  
Painter  
Longueuil

*Éric Comiati*  
Painter  
Saint-Léonard

*Mario Diamond*  
Foreperson  
Trois-Rivières

*Sylvie Dumais*  
Painter  
Centrale des syndicats démocratiques

*Lyne Gagnon*  
Painter  
Montréal

*Marc Gauthier*  
Painter  
Gatineau

*Martine Langlois*  
Painter  
Laval

*Vincent Larue*  
Painter  
Association provinciale des constructeurs d'habitations  
du Québec

*Daniel Mandeville*  
Painter  
Longueuil

*Jean-Marc Mariez*  
Painter  
Conseil provincial du Québec des métiers de la construction  
International

*Marc Paquet*  
Foreperson  
Jonquière

*Daniel Perry*  
Contractor  
Association de la construction du Québec  
Saint-Léonard

*Paul-André Reinhardt*  
Contractor  
Association provinciale des constructeurs d'habitations  
du Québec

*Daniel Sénécal*  
Painter  
CSN Construction

*Michel Sévigny*  
Contractor  
Trois-Rivières

*Robert Williams Watts*  
Painter  
Belœil



# Table of Contents

Introduction to the Program.....	1
Program Components .....	1
Aspects of Program Implementation.....	3
Summary of the Program .....	5

## Part I

Program Goals .....	9
Educational Aims .....	10
Statements of the Competencies.....	11
Grid of Competencies .....	11
Harmonization .....	13

## Part II

Program Competencies .....	15
The Trade and the Training Process .....	17
Health and Safety on Construction Sites .....	21
Using Lifting Equipment .....	25
Using Surface Preparation and Finishing Products .....	29
Preparing and Repairing Plaster Surfaces.....	33
Finishing Plaster Surfaces .....	37
Matching and Reproducing Colours.....	41
Preparing Estimates.....	45
Installing Wall Coverings.....	49
Spraying Surfaces.....	55
Preparing and Finishing Chalky and Synthetic Surfaces.....	59
Preparing and Finishing Wood Surfaces .....	63
Preparing and Finishing Metal Surfaces .....	67
Creating Decorative Effects and Special Finishes.....	71
Organizations Involved in the Construction Industry .....	77
Preparing to Enter the Work Force .....	81





# Introduction to the Program

In vocational training, a program of study presents the competencies required to practise a given trade or occupation at entry level on the job market. The training provided allows students to acquire a degree of versatility that will be useful in their career and personal development.

A program is a coherent set of competencies to be developed. It outlines the knowledge and broad orientations to be favoured during training. The competencies correspond to the tasks of the trade or occupation or to activities related to working or personal life, depending on the case. Learning is acquired in a specific achievement context and targets the ability to act, succeed and evolve.

According to the *Education Act*,<sup>1</sup> “every program shall include compulsory objectives and contents and may include optional objectives and contents that shall be enriched or adapted according to the needs of students who receive the services.” For behavioural competencies, the compulsory components include the statement of the competency, the elements of the competency, the achievement context and the performance criteria; for situational competencies, they include the corresponding components.

For information purposes, programs also provide a grid of competencies, educational aims, a summary of competency-related knowledge and know-how, and guidelines. They also specify the suggested duration of each competency. All optional components of a program may be enriched or adapted according to the needs of the students, the environment and the workplace.

## Program Components

### Program Goals

Program goals consist of the expected outcome at the end of training as well as a general description of a given trade or occupation. They also include the four general goals of vocational training.

### Educational Aims

Educational aims are broad orientations to be favoured during training in order to help students acquire intellectual or motor skills, work habits or attitudes. Educational aims usually address important aspects of career and personal development that have not been explicitly included in the program goals or competencies. They serve to orient appropriate teaching strategies to contextualize students' learning, in keeping with the dimensions underlying the practice of a trade or occupation. They help guide educational institutions in implementing the program.

### Competency

A competency is the ability to act, succeed and evolve in order to adequately perform tasks or activities related to one's working or personal life, based on an organized body of knowledge and skills from a variety of fields, perceptions, attitudes, etc.

A competency in vocational training can be defined in terms of a behaviour or a situation, and includes specific practical guidelines and requirements for learning.

---

<sup>1</sup> *Education Act* (R.S.Q., c. I-13.3, s. 461).

## 1. Behavioural Competency

A behavioural competency describes the actions and the results expected of the student. It consists of the following features:

- The *statement of the competency* is the result of the job analysis, the orientations and general goals of vocational training and other determinants.
- The *elements of the competency* correspond to essential details that are necessary in order to understand the competency *and* are expressed in terms of specific behaviours. They refer to the major steps involved in performing a task or to the main components of the competency.
- The *achievement context* corresponds to the situation in which the competency is exercised at entry-level on the job market. The achievement context attempts to recreate an actual work situation but does not describe a learning or evaluation situation.
- The *performance criteria* define the requirements to be respected. They may refer to elements of the competency or to the competency as a whole. When associated with a specific element, performance criteria are used to judge whether a competency has been acquired. When associated with the competency as a whole, the criteria describe the requirements for performing a task or activity and provide information on the expected level of performance or the overall quality of a product or service.

## 2. Situational Competency

A situational competency describes the situation in which students are placed to acquire learning, and allows for actions and results to vary from one student to another. It consists of the following features:

- The *statement of the competency* is the result of the job analysis, the orientations and general goals of vocational training and other determinants.
- The *elements of the competency* outline the essential aspects of the competency and ensure a better understanding of the competency with respect to the expected outcome. The elements of the competency are fundamental to the implementation of the learning situation.
- The *learning context* provides a broad outline of the learning situation designed to help the students develop the required competency. It is normally divided into three key phases of learning: information, participation and synthesis.
- The *instructional guidelines* provide reference points and means for teachers to ensure that learning takes place and that the context in which it occurs is always the same. These guidelines may include general principles or specific procedures.
- The *participation criteria* describe requirements that the students must meet when participating in learning activities. They focus on how the students take part in the activities rather than on the results obtained. Participation criteria are normally provided for each phase of the learning situation.

## Competency-Related Knowledge and Know-How

Competency-related knowledge and know-how, together with related guidelines, are provided for information purposes. Competency-related knowledge and know-how define the essential and meaningful learning that students must acquire in order to apply and continue to develop the competency. They are in keeping with the job market and are accompanied by guidelines that provide information about the field of application, level of complexity and learning content. They generally encompass learning associated with knowledge, skills, strategies, attitudes, perceptions, etc.

## **Duration**

The total duration of the program is compulsory and must be observed. It consists of teaching time, which includes time for the evaluation of learning and for enrichment or remedial activities, depending on the students' needs. The duration indicated for a given competency refers to the amount of time needed to develop the competency.

The amount of teaching time corresponds to the amount of time allotted to training, which is established during program development as the average amount of time needed to acquire a competency and evaluate learning. This duration is helpful in organizing training.

## **Credit**

A credit is a unit used for expressing the quantitative value of each competency. One credit corresponds to 15 hours of training.

# **Aspects of Program Implementation**

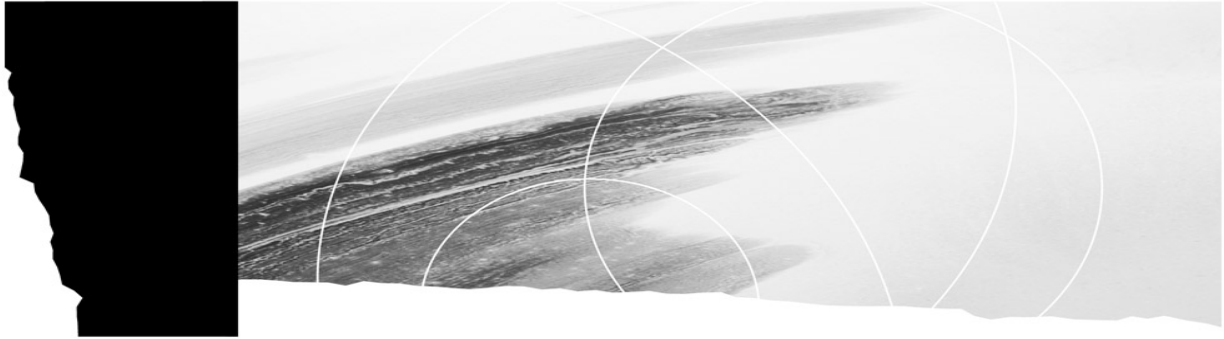
## **Program-Based Approach**

The program-based approach is founded on a comprehensive view of a program of study and its components (e.g. goals, educational aims, competencies). It requires concerted action among all players involved, from the initial stages of program design and development, to program implementation and evaluation. It consists in ensuring that all of the actions and activities proposed are based on the same aims and take into account the same orientations. For students, the program-based approach makes training more meaningful as it presents learning as a coherent whole.

## **Competency-Based Approach**

In vocational training, the competency-based approach is based on a teaching philosophy that is designed to help students mobilize their own individual sets of resources in order to act, succeed and evolve in different contexts, according to established performance levels with all the required knowledge and know-how (e.g. skills, strategies, attitudes, perceptions). The competency-based approach is carried out in situations that are relevant to the students' working life and personal life.





---

5836

**Commercial and Residential Painting**

---

Year of approval: 2013

---

<b>Certification:</b>	Diploma of Vocational Studies
<b>Number of credits:</b>	60 credits
<b>Number of competencies:</b>	16 competencies
<b>Total duration:</b>	900 hours

---

To be eligible for admission to the *Commercial and Residential Painting* program, candidates must meet one of the following requirements:

- Persons holding a Secondary School Diploma or its recognized equivalent.

OR

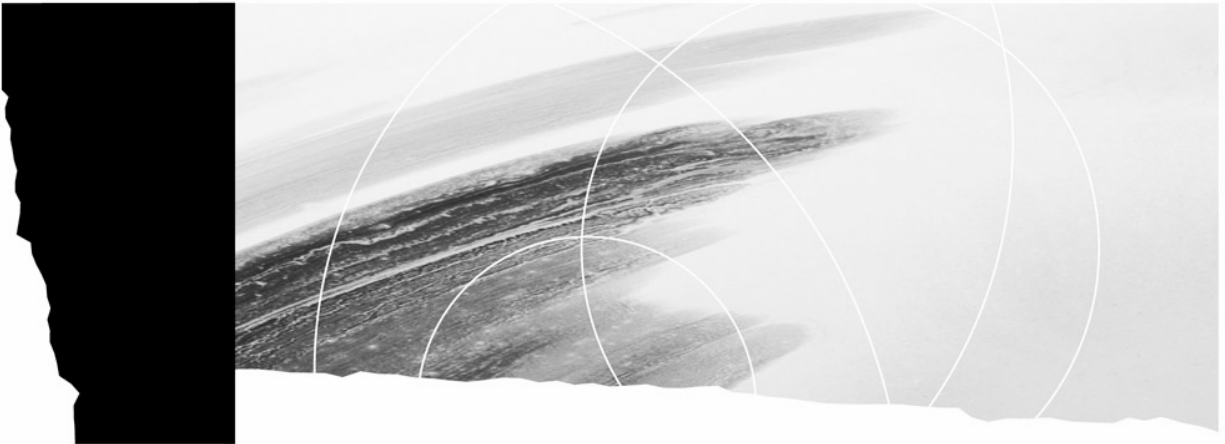
- Persons who are at least 16 years of age on September 30 of the school year in which they begin their training must meet the following condition: they must have obtained Secondary III credits in language of instruction, second language and mathematics in programs established by the Minister, or have been granted recognition of equivalent learning.

OR

- Persons who are at least 18 years of age upon entry into the program and have the following functional prerequisites: the successful completion of the General Development Test as well as language of instruction credits in ENG 3101-1 and ENG 3102-2 or recognition of equivalent learning.

The duration of the program is 900 hours, which includes 600 hours spent on the specific competencies required to practise the trade and 300 hours on general, work-related competencies. The program of study is divided into 16 competencies which vary in length from 15 to 90 hours. The total hours allocated to the program include time devoted to teaching, evaluation of learning and enrichment or remedial activities.

<b>Competency</b>	<b>Code</b>	<b>Number</b>	<b>Hours</b>	<b>Credits</b>
The Trade and the Training Process	941401	1	15 hours	1
Health and Safety on Construction Sites	754992	2	30 hours	2
Using Lifting Equipment	941412	3	30 hours	2
Using Surface Preparation and Finishing Products	941422	4	30 hours	2
Preparing and Repairing Plaster Surfaces	941434	5	60 hours	4
Finishing Plaster Surfaces	941446	6	90 hours	6
Matching and Reproducing Colors	941452	7	30 hours	2
Preparing Estimates	941465	8	75 hours	5
Installing Wall Coverings	941476	9	90 hours	6
Spraying Surfaces	941484	10	60 hours	4
Preparing and Finishing Chalky and Synthetic Surfaces	941496	11	90 hours	6
Preparing and Finishing Wood Surfaces	941506	12	90 hours	6
Preparing and Finishing Metal Surfaces	941516	13	90 hours	6
Creating Decorative Effects and Special Finishes	941526	14	90 hours	6
Organizations Involved in the Construction Industry	754991	15	15 hours	1
Preparing to Enter the Work Force	941531	16	15 hours	1



## **Part I**

---

**Program Goals**

**Educational Aims**

**Statements of the Competencies**

**Grid of Competencies**

**Harmonization**





## Program Goals

The *Commercial and Residential Painting* program prepares students to practise the trade of painter.

Painters apply finishes to protect and decorate surfaces in residential, commercial, institutional and industrial buildings, as well as in civil engineering projects and roadworks. They prepare different surfaces (wood, masonry, drywall, plaster, concrete, synthetics and metal) before applying materials such as paint, high-performance coatings, water- and fire-resistant materials, varnish, lacquer, wall coverings and special finishes.

The preparation and finishing work they do is determined on the basis of the nature of the substrate, the quality of the surface and the desired finish.

Painters work for construction companies or painting or building maintenance contractors, or are self-employed. They work on high-rise residential buildings, house interiors and exteriors, wall covering projects, industrial facilities and tanks, bridges, airports, institutions, drill ships and drilling platforms, and other commercial and industrial projects. Some painters can work at the same site for several years, while others may work for contractors who rarely do business with the same client twice.

More specifically, in the construction sector, according to the *Regulation respecting the vocational training of workforce in the construction industry* (R.R.Q., chapter R-20, r. 8, Schedule A, s. 13), “painter” means anyone who:

- a) prepares and conditions the inside and outside surfaces of any structure and covers same with one or more coats of film-forming compound for protection and aesthetic purposes. “Film-forming compound” means any liquid, sticky, natural or synthetic, transparent, semi-transparent, opaque or coloured material that forms a continuous protective film on surfaces;
- b) covers wall surfaces with wallpaper or any other similar material that is natural or synthetic, pre-pasted or glued;
- c) performs other work entailing the application of backing, corner beads and accessories, as well as joint-pointing wallboard.

Performance of the work described in the first paragraph includes trade-specific handling for the purposes of immediate and permanent installation.”

The program goals of the *Commercial and Residential Painting* program are based on the general goals of vocational training. These goals are as follows:

- To help students develop effectiveness in the practice of a trade or occupation, that is:
  - to teach students to perform roles, functions, tasks and activities associated with the trade or occupation upon entry into the job market
  - to prepare students to progress satisfactorily on the job (which implies having the technical and technological knowledge and skills in such areas as communication, problem solving, decision making, ethics, health and safety)
- To help students integrate into the work force, that is:
  - to familiarize students with the job market in general, and with the specific context of their chosen trade or occupation
  - to familiarize students with their rights and responsibilities as workers

- To foster students' personal development and acquisition of occupational knowledge, skills, perceptions and attitudes, that is:
  - to help students develop their autonomy and ability to learn, and acquire effective work methods
  - to help students understand the principles underlying the techniques and the technology used in the trade or occupation
  - to help students develop self-expression, creativity, initiative and entrepreneurial spirit
  - to help students adopt the attitudes required to successfully practise the trade or occupation, and instill in them a sense of responsibility and a concern for excellence
- To promote job mobility, that is:
  - to help students develop positive attitudes toward change
  - to help students develop the means to manage their careers by familiarizing them with entrepreneurship

## **Educational Aims**

The aim of the *Commercial and Residential Painting* program is to help students develop attitudes and behaviours that representatives from education and the field deem essential to the practice of the trade:

- Develop dexterity and acquire effective work methods.
- Develop a sense of how much work they are expected to do in a given amount of time.
- Develop a sense of the aesthetic impact and consequences of poorly done work.
- Develop autonomy and a desire for improvement.

# Statements of the Competencies

## List of Competencies

Determine their suitability for the trade and the training process.  
Ensure health, safety and physical well-being on construction sites.  
Use lifting equipment.  
Associate products with the preparation and finishing of surfaces.  
Prepare and repair plaster surfaces.  
Finish plaster surfaces.  
Match and reproduce colours.  
Prepare estimates.  
Install wall coverings.  
Spray surfaces.  
Prepare and finish chalky and synthetic surfaces.  
Prepare and finish wood surfaces.  
Prepare and finish metal surfaces.  
Create decorative effects and special finishes.  
Become familiar with the organizations involved in the construction industry.  
Prepare to enter the work force.

## Grid of Competencies

The grid of competencies shows the relationship between general competencies, which correspond to work-related activities, and specific competencies, which are required to practise the particular trade or occupation.

The general competencies appear on the horizontal axis and the specific competencies, on the vertical axis. The symbol (○) indicates a correlation between a general and a specific competency. Shaded symbols indicate that these relationships have been taken into account in the acquisition of specific competencies. The logic used in constructing the grid influences the course sequence. Generally speaking, this sequence follows a logical progression in terms of the complexity of the learning involved and the development of the students' autonomy. The vertical axis presents the specific competencies in the order in which they should be acquired and serves as a point of departure for determining how all of the competencies will be taught.

## GRID OF COMPETENCIES

<b>COMMERCIAL AND RESIDENTIAL PAINTING</b>	<b>Competency number</b>	<b>Type of competency</b>	<b>Duration (in hours)</b>	<b>GENERAL COMPETENCIES</b>								
				Determine their suitability for the trade and the training process	Ensure health, safety and physical well-being on construction sites	Use lifting equipment	Associate products with the preparation and finishing of surfaces	Match and reproduce colours	Prepare estimates	Spray surfaces	Become familiar with the organizations involved in the construction industry	Prepare to enter the work force
<b>SPECIFIC COMPETENCIES</b>	<b>Competency number</b>	<b>Type of Competency</b>	<b>Duration (in hours)</b>	1	2	3	4	7	8	10	15	16
				S	S	B	B	B	B	B	S	S
				15	30	30	30	30	75	60	15	15
Prepare and repair plaster surfaces	5	B	60	○	●	●	●	○	○	○	○	○
Finish plaster surfaces	6	B	90	○	●	●	●	○	○	○	○	○
Install wall coverings	9	B	90	○	●	●	●	●	●	○	○	○
Prepare and finish chalky and synthetic surfaces	11	B	90	○	●	●	●	●	●	●	○	○
Prepare and finish wood surfaces	12	B	90	○	●	●	●	●	●	●	○	○
Prepare and finish metal surfaces	13	B	90	○	●	●	●	●	●	●	○	○
Create decorative effects and special finishes	14	B	90	○	●	●	●	●	●	●	○	○

## Harmonization

The Ministère de l'Éducation, du Loisir et du Sport harmonizes its vocational and technical programs by establishing similarities and continuity between secondary- and college-level programs within a particular sector or between sectors in order to avoid overlap in program offerings, to recognize prior learning and to optimize the students' progress.

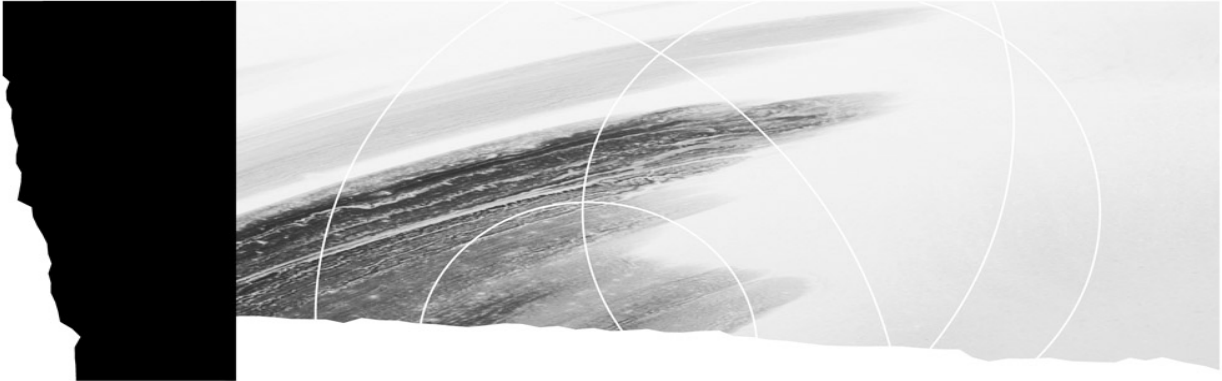
Harmonization establishes consistency between training programs and is especially important in ensuring that the tasks of a trade or occupation are clearly identified and described. Harmonization makes it possible to identify tasks requiring competencies that are common to more than one program. Even if there are no common competencies, training programs are still harmonized.

Harmonization is said to be “inter-level” when it focuses on training programs at different levels, “intra-level” when it focuses on programs within the same educational level, and “inter-sector” when carried out between programs in various sectors.

An important aspect of harmonization is that it allows the common features of competencies to be identified and updated as needed. Common competencies are those that are shared by more than one program; once acquired in one program, they can be recognized as having been acquired in another. Competencies with exactly the same statement and elements are said to be identical. Common competencies that are not identical but have enough similarities to be of equal value are said to be equivalent.

The *Commercial and Residential Painting* program does not share any competencies with other programs at this time.





## **Part II**

---

### **Program Competencies**





Competency 1                      Duration 15 hours    Credit 1

## ***Situational Competency***

---

### **Statement of the Competency**

Determine their suitability for the trade and the training process.

### **Elements of the Competency**

- Be familiar with the nature of the trade of commercial and residential painter.
- Recognize the behaviours and attitudes conducive to the practice of the trade.
- Understand the training process.
- Confirm their career choice.

### **Learning Context**

---

#### **Information Phase**

- Learning about the job market and prospects in the field of commercial and residential painting, including business opportunities.
- Learning about the different sectors of activity within and outside the construction industry in which painters work: residential, commercial, institutional, industrial, civil engineering and roadworks.
- Learning about the nature and requirements of the job, as well as its advantages and disadvantages.
- Learning about the regulatory framework for the trade.
- Learning about the main trends in the sector of activity.
- Learning about the attitudes, skills and behaviours associated with quality customer service.
- Learning about the attitudes and behaviours associated with teamwork, employer satisfaction, competitiveness and working with tradespeople in other specialties.
- Learning about the program of study and the training process.

#### **Participation Phase**

- Discussing their perception of the trade:
  - advantages and disadvantages
  - employers' requirements
  - customer service
- Discussing ways of keeping their knowledge and skills up to date.
- Discussing the information obtained during a visit to a company or from talking to trade specialists.
- Sharing their initial reactions to the program of study and the training process.

#### **Synthesis Phase**

- Assessing their career choice by comparing the requirements of the trade with their own aptitudes, interests, strengths and limitations.
- Presenting the results of their assessment.

## Instructional Guidelines

---

- Create a climate that fosters mutual respect.
- Show appreciation for the contribution of each student during group discussions.
- Encourage students to take part in the suggested activities.
- Provide students with the means to assess their career choice honestly and objectively.
- Organize activities representative of the workplace: invite speakers, visit retailers, wholesalers, etc.
- Make available all pertinent sources of information.

## Participation Criteria

---

### Information Phase

- Gather information on the topics to be covered.

### Participation Phase

- Express their views on the trade and the training program during a group meeting.
- Participate in the suggested activities.

### Synthesis Phase

- Write a report that sums up their preferences, interests, strengths and limitations with respect to the trade.

## Suggestions for Competency-Related Knowledge and Know-How

---

The following is a summary of the knowledge, skills, strategies, attitudes and perceptions related to each phase of the learning context, along with their attendant guidelines.

### Information Phase

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>• Identify the main sources of information.</li> <li>• Determine a method for recording and presenting data.</li> <li>• Show a desire to learn.</li> <li>• Determine the aspects to consider when exploring the trade.</li> <li>• Show concern for the responsibility associated with the practice of the trade.</li> </ul> | Trade analysis report and other relevant documents<br>Trade-specific terms and expressions<br>Tasks and conditions for the practice of the trade, workplaces, advantages and disadvantages, workers' rights and responsibilities, etc. |
| <ul style="list-style-type: none"> <li>• Identify the main regulations and organizations governing the trade.</li> </ul>   | <i>National Building Code</i> , Commission de la santé et de la sécurité du travail (CSST), Commission de la construction du Québec (CCQ), Commission des normes du travail (CNT), Emploi-Québec, etc.                                 |
| <ul style="list-style-type: none"> <li>• Identify the behaviours and attitudes associated with quality customer service.</li> </ul>  | Clean and well-groomed appearance; observance of dress code; clean equipment and service vehicle; punctuality; politeness and courtesy; respect for the environment and clients' privacy; no use of drugs or alcohol on the job; etc.  |

- Identify the behaviours and attitudes associated with employer satisfaction, competitiveness and working with tradespeople in other fields.

Communication, mutual assistance, observance of hierarchy, conflict resolution, etc.

#### Participation Phase

- Explain the main rules governing group discussion.
- Make an effort to share their perception of the trade.
- Respect others' opinions.
- Learn about the program requirements.

Characteristics that foster communication: active listening, self-confidence, openness, ability to adapt, courtesy, language level, etiquette, etc.

#### Synthesis Phase

- Learn about the importance of practising a trade that meets their aspirations and expectations.
- Recognize their skills and aptitudes.

Effect on their career choice

Technical and personal communication skills, ability to adapt, critical judgment, problem-solving ability, etc.



Competency 2      Duration 30 hours   Credits 2

## ***Situational Competency***

---

### **Statement of the Competency**

Ensure health, safety and physical well-being on construction sites.

### **Elements of the Competency**

- Adopt a responsible attitude regarding dangers to health and safety.
- Be aware of the importance of complying with occupational health and safety standards and regulations.
- Recognize dangerous situations or unsafe behaviours and applicable preventive measures.

### **Learning Context**

---

#### **Information Phase**

- Learning about the risks inherent in construction sites.
- Learning about health and safety standards and regulations on construction sites.
- Learning about emergency measures.
- Reflecting on the importance of developing occupational health and safety skills.

#### **Participation Phase**

- Experiencing situations in which it is necessary to prevent risks and eliminate hazards associated with the environment, facilities, equipment, machinery, tools, materials, energy sources, etc.
- Participating in activities that allow students to recognize risks associated with transporting loads and working in constricted postures.
- Participating in activities that allow students to recognize safety signs and symbols (e.g. hazardous products, roadwork, transportation of hazardous materials).
- Comparing different high-risk behaviours observed on a construction site and identifying the basic principles underlying safe behaviours.

#### **Synthesis Phase**

- Producing a report containing:
  - a summary of their newly acquired knowledge and skills
  - an assessment of their attitude toward occupational health and safety
  - their goals and means of making improvements

### Instructional Guidelines

---

- Make available all pertinent sources of information.
- Invite, as needed, resource persons specialized in certain areas of occupational health and safety to speak to the class.
- Make effective use of audiovisual materials.
- Make extensive use of learning situations that are representative of conditions on construction sites.
- Ensure that students avoid dangerous behaviours during simulation exercises.
- Encourage all students to participate in discussions.
- Guide the students' assessment process by providing them with appropriate tools (e.g. a questionnaire) to help them analyze their experience and set objectives.

### Participation Criteria

---

#### Information Phase

- Consult available sources of information.
- Describe the advantages of complying with health and safety standards and regulations.

#### Participation Phase

- Participate actively in the suggested activities.
- State the principles underlying safe behaviour.
- List the risks inherent in construction sites and the applicable preventive measures.

#### Synthesis Phase

- Produce a report containing:
  - a summary of their newly acquired knowledge and skills
  - an assessment of their attitude toward occupational health and safety
  - their goals and means of protecting their health, safety and physical well-being, as well as that of others, on a construction site

### Suggestions for Competency-Related Knowledge and Know-How

---

The following is a summary of the knowledge, skills, strategies, attitudes and perceptions related to each phase of the learning context, along with their attendant guidelines.

#### Information Phase

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>• Be receptive to information about health and safety on construction sites.</li> </ul>  |  |
| <ul style="list-style-type: none"> <li>• Recognize the most common dangers to health, safety and physical well-being on construction sites.</li> </ul>                              | Occupational illnesses and injuries, accidents, all types of harassment, etc.  |
| <ul style="list-style-type: none"> <li>• Recognize the sources of information relating to health and safety on construction sites and find information in these sources.</li> </ul> | Occupational health and safety regulations, including information about the roles and responsibilities of the different actors with respect to health and safety on construction sites |

- Identify the advantages of complying with health and safety standards and regulations.

Prevention of illness and accidents

#### Participation Phase

- Associate the risks inherent in construction sites and the trade with applicable preventive measures.

Risks inherent in construction sites and in the practice of the trade  
Preventive measures to apply according to the risks involved  
Workplace Hazardous Materials Information System (WHMIS)





Competency 3      Duration 30 hours Credits 2

***Behavioural Competency***

---

**Statement of the Competency**

Use lifting equipment.

**Achievement Context**

- For commercial and residential painting jobs requiring the use of various types of lifting equipment
- Given:
  - the *Safety Code for the construction industry*
  - manufacturers' manuals
- Using:
  - the required personal and collective protective equipment
  - ladders, stepladders, scaffolding, cherry pickers and elevated work platforms
  - hand and power tools

**Elements of the Competency****Performance Criteria**

---

- |   |   |
|---|---|
| 1. Inspect scaffolding and ladders.                   | <ul style="list-style-type: none"> <li>• Application of Commission de la santé et de la sécurité du travail (CSST) standards respecting scaffolding and ladders</li> <li>• Identification of defects likely to compromise the solidity and safe use of scaffolding and ladders</li> <li>• Application of corrective measures, if necessary</li> </ul>   |
| 2. Handle and set up scaffolding and ladders.         | <ul style="list-style-type: none"> <li>• Handling in accordance with transportation and handling rules</li> <li>• Solid setup, with anchoring and fasteners, if applicable</li> <li>• Proper installation of measures to prevent falls (toeboards, guard rails, etc.)</li> <li>• Installation of appropriate signs and markings, if applicable</li> <li>• Safe movement of scaffolding and ladders, taking into account the appropriate techniques and restrictions such as height, obstacles to traffic and load limits</li> </ul> |
| 3. Move about on scaffolding and ladders.             | <ul style="list-style-type: none"> <li>• Safe movement in accordance with standards</li> <li>• Use of harness and other protective equipment</li> <li>• Consideration of restrictions on movement</li> </ul>  |
| 4. Use a cherry picker and an elevated work platform. | <ul style="list-style-type: none"> <li>• Safe use in accordance with standards</li> <li>• Consideration of the specific dangers inherent in using this type of equipment</li> </ul>   |

## 5. Put away scaffolding and ladders.

- Appropriate protection and cleaning of equipment depending on its composition
- Basic scaffolding and ladder maintenance
- Safe storage in accordance with manufacturers' recommendations

*For the competency as a whole:*

- Observance of occupational health and safety rules
- Application of standards respecting the necessary equipment
- Adoption of ergonomic work postures
- Observance of manufacturers' instructions
- Appropriate use of trade-specific vocabulary

### Suggestions for Competency-Related Knowledge and Know-How

---

The following is a summary of the knowledge, skills, strategies, attitudes and perceptions related to each element of the competency, along with their attendant guidelines.

## 1. Inspect scaffolding and ladders.

- Distinguish between different types of scaffolding, ladders and stepladders.

Metal-frame scaffolding, trestle scaffolding, mobile scaffolding, etc., and their uses

Categories, components and uses of ladders

Straight ladders, plain trestle ladders, sliding ladders and special combination ladders and their uses

Categories, components and uses of stepladders

Limits with respect to possible modifications (manufacturers' instructions)

Composition of equipment (wood, metal, synthetics)

Properties of equipment (load bearing capacity, fire resistance, rust resistance, wear and rot resistance, electrical insulation, etc.)

- Recognize the main problems associated with the use of scaffolding and ladders.

Misuse (lack of solidity, instability, improper height, overload, etc.)

Poor condition (rust, rot, distortion, improper fastenings, etc.)

## 2. Handle and set up scaffolding and ladders.

- Apply techniques for handling and transporting scaffolding and ladders.

Rules of the *Highway Safety Code* with respect to the transportation of ladders

Ergonomic techniques for handling and transporting scaffolding and ladders alone and with a partner

- Recognize equipment to prevent falls. Safety harness, lanyard, hasp, lifeline, guard rail, etc.  
Anchoring and fastening methods
  - Recognize different signs and markings. Temporary safety signs and markings (tapes, cones, placards, warning devices, etc.)
  - Recognize the restrictions associated with distance from electrical installations and buildings. *Safety Code for the construction industry*
  - Recognize the difficulties inherent in installing scaffolding and ladders. Uneven ground, load bearing capacity of soil, bracing and levelling methods (shimming, anchoring, etc.)
3. Move about on scaffolding and ladders.
- Recognize the three support points for access equipment.
  - Make sure to have free access and an adequate surface for moving about. Safe movement of fall protection system  
Safe arrangement of materials and equipment (ladder hook, etc.)
  - Recognize different ways of dealing with the effects of working at a height. Breathing techniques, psychological safety given the amount of stress, etc.
4. Use a cherry picker and an elevated work platform.
- Recognize how the controls work. Adjustment of engine speed, layout and direction of controls, functions of the different types of controls
5. Put away scaffolding and ladders.
- Recognize the limits and restrictions associated with the maintenance of scaffolding and ladders. Limits of basic maintenance techniques (cleaning, replacement of rigging)



Competency 4      Duration 30 hours Credits 2

***Behavioural Competency***

---

**Statement of the Competency**

Associate products with the preparation and finishing of surfaces.

**Achievement Context**

- For painting jobs in the residential, commercial and industrial, civil engineering and roadworks sectors
- Using:
  - common surface coatings
  - high-performance surface coatings
  - architectural coatings
  - surface preparation products
  - maintenance products, cleaners and thinners
  - hand and pneumatic tools
- Given:
  - the necessary protective equipment
  - product technical data sheets
  - material safety data sheets
  - manufacturers' manuals

**Elements of the Competency**

---

1. Describe various types of surface preparation products.

- Accurate distinction between types of coatings, caulking compounds, adhesives, primers, etc.
- Accurate association of the surface preparation products with their common uses
- Association of type of solvent with the surface preparation product used
- Recognition of the directions for using and storing surface preparation products
- Recognition of the characteristics of expired or spoiled products

2. Describe the main types of paints, architectural coatings and solvents used in commercial and residential painting.

- Accurate distinction between the types of paints and architectural coatings based on their ingredients
- Association of coatings with their common uses
- Association of types of finishes with the characteristics of the surfaces they are used on
- Association of type of solvent with the appropriate coating
- Recognition of the directions for use and storage of the different types of paints, architectural coatings and solvents
- Recognition of the characteristics of an expired or spoiled product

- |  |  |
|--|--|
| 3. Distinguish between different types of cleaners, maintenance products and thinners. | <ul style="list-style-type: none"> <li>• Association of types of solvents with their use in cleaning and maintaining hand and pneumatic tools</li> <li>• Association of types of thinners with the appropriate coatings</li> <li>• Recognition of the directions for use and storage of cleaners, maintenance products and thinners</li> </ul> |
| 4. Identify trends in surface and architectural coatings.                              | <ul style="list-style-type: none"> <li>• Recognition of the main decorating trends</li> <li>• Recognition of trends in environmental protection, in particular environmentally friendly and biodegradable products</li> </ul>  |

*For the competency as a whole:*

- Observance of occupational health and safety rules
- Observance of environmental protection measures
- Observance of directions for using products and hand and pneumatic tools
- Observance of manufacturers' instructions
- Appropriate use of trade-specific vocabulary

### **Suggestions for Competency-Related Knowledge and Know-How**

---

The following is a summary of the knowledge, skills, strategies, attitudes and perceptions related to each element of the competency, along with their attendant guidelines.

- |  |  |
|--|--|
| 1. Describe various types of surface preparation products.   |  |
| <ul style="list-style-type: none"> <li>• Read the data sheets for different products.</li> </ul>                                       | <p>Compatibility of product with surfaces, risks inherent in the incompatibility of products with surfaces, sequence of operations for preparing solutions, etc.</p> |
| <ul style="list-style-type: none"> <li>• Be familiar with the compatibility of latex, acrylic, alkyd and epoxy products.</li> </ul>    |  |
| <ul style="list-style-type: none"> <li>• Recognize the consistency of different types of products by looking at them.</li> </ul>       | <p>Hardened products, dried products, etc.</p>   |
| <ul style="list-style-type: none"> <li>• Identify preventive measures and methods for the different types of products used.</li> </ul> | <p>Chemical cartridge respirators, gloves, glasses, appropriate ventilation, proximity of fire extinguishers, etc.</p>   |

2. Describe the main types of paints, architectural coatings and solvents used in commercial and residential painting.
  - Read the data sheets for different products.      Viscosity, pot life, appropriate temperature, compatibility, drying time, surface preparation, etc.
  - Recognize the consistency of different types of paint by looking at them.      Homogeneity, viscosity, fluidity, etc.
3. Distinguish between different types of cleaners, maintenance products and thinners.
  - Recognize the compatibility of different products.
4. Identify trends in surface and architectural coatings.
  - Keep up with trends regarding new products and technologies.      Environmental standards (e.g. Leadership in Energy and Environmental Design [LEED])





Competency 5      Duration 60 hours   Credits 4

***Behavioural Competency***

---

**Statement of the Competency**

Prepare and repair plaster surfaces.

**Achievement Context**

- Working with drywall
- Working with new or existing wallboard
- Working with interior surfaces (walls and ceilings)
- Given instructions or work orders
- Using:
  - personal and collective protective equipment
  - lifting equipment, if applicable
  - hand and power tools
  - maintenance products, cleaners and thinners
  - products and equipment for preparing and repairing surfaces
  - product technical data sheets
  - material safety data sheets
  - manufacturers’ manuals

**Elements of the Competency**

**Performance Criteria**

---

- |  |   |
|--|---|
| <p>1. Plan the work.</p>                 | <ul style="list-style-type: none"> <li>• Accurate interpretation of instructions or work order</li> <li>• Assessment of the type of preparation or repair required, if applicable</li> <li>• Appropriate choice of products, materials, tools and equipment</li> </ul>                    |
| <p>2. Protect the adjacent surfaces.</p> | <ul style="list-style-type: none"> <li>• Careful installation of protective floor and wall coverings</li> <li>• Verification of seal</li> <li>• Application of the appropriate measures to limit and contain waste</li> <li>• Installation of lifting equipment, if applicable</li> </ul> |
| <p>3. Clean surfaces.</p>                | <ul style="list-style-type: none"> <li>• Appropriate use of hand tools, cleaners and cleaning accessories</li> <li>• Absence of residue (contaminants) that might hinder subsequent preparation and repair work</li> <li>• Visual inspection of cleaning</li> </ul>                       |
| <p>4. Prepare and repair surfaces.</p>   | <ul style="list-style-type: none"> <li>• Appropriate use of hand and power tools, products and accessories to prepare the surfaces</li> <li>• Sanding in accordance with the appropriate techniques and the desired finish</li> </ul>   |

5. Finish drywall joints.
  - Appropriate use of the necessary hand and power tools, equipment and accessories
  - Installation of metal or plastic corners and reinforcing tape where necessary
  - Appropriate preparation and application of plaster, taking into account the number of coats necessary and the drying time
  - Appropriate sanding of surfaces
  - Observance of levelling tolerances
  - Smooth and flawless surface
  
6. Prime surfaces.
  - Verification of ventilation, air conditioning, and the humidity of the ambient air and the substrate
  - Application of the products required given the technique used, the substrate and the desired surface
  - Appropriate application of sealers and stain repellents, if applicable
  - Application of coats of primer using a paintbrush and roller, using the appropriate technique
  - Careful sanding of primed surface
  
7. Apply caulking.
  - Appropriate use of caulking gun and caulking
  - Thorough inspection of caulking
  
8. Clean and tidy up the work area.
  - Restoration of work area to its original condition
  - Thorough cleaning, regular maintenance and storage of hand and power tools
  - Appropriate storage of equipment and products
  - Disposal or recycling of products and materials in accordance with environmental protection measures

*For the competency as a whole:*

- Observance of occupational health and safety rules
- Adoption of ergonomic work postures
- Observance of environmental protection measures
- Observance of manufacturers' instructions
- Thorough quality inspection
- Appropriate use of trade-specific vocabulary

**Suggestions for Competency-Related Knowledge and Know-How**

The following is a summary of the knowledge, skills, strategies, attitudes and perceptions related to each element of the competency, along with their attendant guidelines.

1. Plan the work.
  - Recognize the compatibility of the products and equipment used. Association of the appropriate products and materials with the job to be done
  
2. Protect the adjacent surfaces.
  - Be familiar with protective floor and wall coverings. Tarpaulins, drop cloths, plastic, paper, tape, etc.
  
3. Clean surfaces.
  - Recognize the types of products used to remove contaminants that will not damage the coating. Solvents, detergents, etc.
  - Apply the appropriate cleaning techniques depending on the condition of the surface. Rag, vacuum cleaner, cleaner, etc.
  
4. Prepare and repair surfaces.
  - Identify surfaces on which joint finishing techniques can be used. Plaster, drywall, fibre cement, etc.
  - Recognize the materials used to finish joints. Joint compound, powders (plaster of Paris, chemical hardeners, etc.), light plasters, reinforcing tape, etc.
  - Use hand and power tools to prepare and repair surfaces. Spatulas, trowels, mortar boards, hand and power sanders, etc.
  
5. Finish drywall joints.
  - Determine the amount of plaster needed for the job. Surface area, loss, proportions, drying time, etc. Types of imperfections: holes, cracks, open corners, blisters, etc.
  - Determine a logical sequence for carrying out the work.
  - Mix the plaster. Mixing by hand or using an electric mixer, consistency, etc.
  - Distinguish between the different metal and plastic corners.
  - Distinguish between the different types of equipment and accessories used to sand surfaces. Different grades of sandpaper, discs, different materials, etc.

- Recognize surface levelling tolerances. Flat, convex and concave surfaces  
Visually or by touch
6. Prime surfaces.
- Be familiar with the different types of paintbrushes, rollers, roller covers and other hand tools. Types of fibres (silk, synthetic), nap, trays, etc.
  - Recognize the level of humidity of a surface. Visually or by touch
  - Recognize the types of primers and their compatibility. Nature of surface  
Sealers, stain killers, thinners, if applicable
  - Determine the amount of primer needed.
  - Determine a logical sequence for carrying out the work. Cutting, rolling
  - Handle paintbrushes and rollers. Dipping, application, direction, pressure, length and width of application, speed, etc.
  - Recognize the importance of sanding the surface after applying the primer. Appropriate adhesion of finish
7. Apply caulking.
- Distinguish between the different types of caulking. Filler, acrylic, silicone, etc.
  - Remove existing caulking. Hand tools, solvents, etc.
  - Apply the different techniques for using a caulking gun based on the desired result. Convex, concave, etc.
8. Clean and tidy up the work area.
- Clean the hand tools using recognized techniques. Techniques for cleaning paintbrushes, rollers, roller covers, scrapers, trays, etc.
  - Recognize the importance of properly putting away tools, equipment and products. Protection of tools (cases, tool box), deterioration of materials, life span and replacement cost

Competency 6      Duration 90 hours Credits 6

***Behavioural Competency***

---

**Statement of the Competency**

Finish plaster surfaces.

**Achievement Context**

- Working with drywall
- Working with new or existing wallboard
- Working with interior surfaces (walls and ceilings)
- Given instructions
- Using:
  - personal and collective protective equipment
  - lifting equipment
  - hand and power tools
  - maintenance products, cleaners and thinners
  - products and equipment for preparing and repairing surfaces
  - various coatings
  - product technical data sheets
  - material safety data sheets
  - manufacturers' manuals

**Elements of the Competency**

---

**Performance Criteria**

1. Plan the work.

- Accurate identification of pertinent information regarding the work to be done
- Identification of the condition of the surface (types of primers, contaminants, imperfections, etc.)
- Accurate determination of the preparation needed
- Selection of the hand and power tools, equipment, products and accessories needed for the job
- Determination of a logical sequence for carrying out the work and estimate of the amount of time needed to prepare and finish the surfaces

2. Prepare surfaces.

- Effective setup of work area
- Appropriate preparation of samples, if applicable
- Preparation of the different coatings
- Appropriate protection of adjacent surfaces
- Appropriate application of masking material
- Proper installation of lifting equipment, if applicable
- Appropriate sanding and cleaning of surfaces

3. Apply the coatings.
- Verification of ventilation, air conditioning, and the humidity of the ambient air and the substrate
  - Observance of application time
  - Appropriate cutting and rolling of horizontal and vertical surfaces
  - Regular and consistent application of coating
  - Uniform, consistent texture
  - Observance of drying time between coats
  - Appropriate sanding between coats
4. Check the quality of the work.
- Detection of any visible imperfections
  - Inspection of surfaces by touch
  - Application of appropriate corrective measures, if applicable
5. Finish the work.
- Methodical removal of masking material
  - Appropriate cleaning and tidying of work area
  - Thorough cleaning, regular maintenance and storage of hand and power tools
  - Safe disposal or recycling of hazardous products and materials in accordance with environmental protection measures

*For the competency as a whole:*

- Observance of occupational health and safety rules
- Adoption of ergonomic work postures
- Observance of environmental protection measures
- Proper use of hand and power tools, equipment and products
- Observance of manufacturers' instructions
- Achievement of desired quality
- Appropriate use of trade-specific vocabulary

### **Suggestions for Competency-Related Knowledge and Know-How**

---

The following is a summary of the knowledge, skills, strategies, attitudes and perceptions related to each element of the competency, along with their attendant guidelines.

1. Plan the work.
- Recognize the compatibility of primers and finishing products.      Generic types (adhesion, dilution)
  - Recognize the finishes required for different surfaces.      Need for maintenance (washable), diffusion of light and ambience, surface imperfections, etc.

- Determine the need for samples. For test purposes or to show the client (reflection of light, resistance to cleaning, etc.)
- 2. Prepare surfaces.
  - Be familiar with the types of masking tape and dispensers for the type of job in question. Desired adhesion, estimated time, etc.
  - Apply the techniques for applying masking tape. Manual method, precision, etc.
- 3. Apply the coatings.
  - Recognize the effectiveness of an organized work area. Arrangement and proximity of tools and equipment
  - Make an effort to improve efficiency. Logical sequence for carrying out the work, ergonomic work postures, etc.
- 4. Check the quality of the work.
  - Identify imperfections that could affect the quality of the work. Blisters, holes, bumps, uneven surface, cracks, drips, etc.
  - Identify methods of correcting imperfections. Scraping, sanding, filling, etc.
- 5. Finish the work.
  - Apply the techniques for removing masking tape. Cutting before removing, pulling at a 90° angle from the surface, removing residue, etc.





Competency 7      Duration 30 hours Credits 2

***Behavioural Competency***

---

**Statement of the Competency**

Match and reproduce colours.

**Achievement Context**

- Working with new or existing interior or exterior surfaces
- Given instructions
- Using:
  - personal protective equipment
  - colour charts and samples
  - colour recipes
  - hand and power tools
  - a colour dispenser
  - base paints and colours
  - product technical data sheets
  - material safety data sheets
  - manufacturers' manuals

**Elements of the Competency****Performance Criteria**

---

- |   |   |
|---|---|
| 1. Create colour harmonies using primary, secondary and tertiary colours. | <ul style="list-style-type: none"> <li>• Appropriate preparation of different colours</li> <li>• Precise preparation of secondary and tertiary colours</li> <li>• Logical arrangement of colours</li> <li>• Cleanliness of work</li> </ul>  |
| 2. Reproduce colour recipes.  | <ul style="list-style-type: none"> <li>• Precise use of manufacturers' colour codes</li> <li>• Proper use of colour dispenser</li> <li>• Homogeneous mixing of products by hand, or using the boxing technique or a paint mixer</li> <li>• Colours and textures in accordance with recipes</li> </ul>                               |
| 3. Reproduce colours without using a recipe.                              | <ul style="list-style-type: none"> <li>• Use of universal or manufacturers' colourings based on the desired colour</li> <li>• Homogeneous mixing of products by hand, or using the boxing technique or a paint mixer</li> <li>• Colours and textures in accordance with desired results</li> </ul>                                  |
| 4. Create colour harmonies.   | <ul style="list-style-type: none"> <li>• Pertinent connections between the surfaces or coatings and the desired finish</li> <li>• Appropriate use of colour chart</li> <li>• Observance of warm and cool colour harmonies</li> <li>• Creation and reproduction of hues, shades and tones depending on the desired effect</li> </ul> |

*For the competency as a whole:*

- Observance of occupational health and safety rules
- Observance of environmental protection measures
- Observance of manufacturers' instructions
- Thorough quality inspection
- Safe disposal or recycling of hazardous products and materials in accordance with environmental protection measures
- Appropriate use of trade-specific vocabulary

### **Suggestions for Competency-Related Knowledge and Know-How**

---

The following is a summary of the knowledge, skills, strategies, attitudes and perceptions related to each element of the competency, along with their attendant guidelines.

1. Create colour harmonies using primary, secondary and tertiary colours.
  - Distinguish between the main colour theories.      Leonardo da Vinci, Munsell, etc.
  - Recognize the properties of colours.                      Influences, physiological and psychological effects, etc.
  - Distinguish between hues, shades and tones.
  - Distinguish between universal and manufacturers' colourings.
2. Reproduce colour recipes.
  - Recognize colourings and base paints.                      Colourings by letter  
White and neutral bases, etc.
  - Interpret a manufacturer's recipe.                              Codes, quantities
  - Fill and maintain a colour dispenser.
  - Distinguish between the different methods of preparing colours.      Mechanical and automated carousels
  - Distinguish between the different mixing methods.
  - Observance of mixing methods and times.                      Manual and mechanical methods

## 3. Reproduce colours without using a recipe.

- Analyze the colour sample.
- Know how to recognize the initial colour.
- Choose the paint base.
- Create hues, shades and tones.
- Observe the drying time in order to obtain the desired colour.

Consideration of degree of luminosity

## 4. Create colour harmonies.

- Distinguish between the different types of finishes.
- Recognize the factors that affect colour matching.
- Identify the existing colour of a substrate using a colour chart.

Matte, satin, velvet, pearl, semi-gloss, gloss, etc.

Types of lighting, types of substrate, location (dark, light), shapes, types of finishes, existing colours, etc.



Competency 8      Duration 75 hours      Credits 5

## ***Behavioural Competency***

---

### **Statement of the Competency**

Prepare estimates.

### **Achievement Context**

- In the residential, institutional, commercial, industrial, civil engineering and roadworks sectors
- Working with different types of surfaces such as plaster, drywall, wood, metal, chalky and synthetic surfaces
- Given:
  - work orders
  - drawings and specifications
- Using:
  - measuring instruments and devices
  - drafting instruments
  - calculators, etc.
  - manufacturers' manuals

### **Elements of the Competency**

1. Interpret drawings and specifications.

### **Performance Criteria**

- Accurate interpretation of the general information contained in a drawing
- Recognition of the different views in a drawing
- Accurate identification of the dimensions in a drawing
- Accurate interpretation of the general information in specifications
- Accurate identification of the necessary equipment, products and materials needed based on specifications

2. Take measurements.

- Proper use of different measuring instruments and devices
- Accurate reading of different measurements: height, width, length, surface, thickness, radius, diameter, etc.
- Accurate conversion of units from the imperial to the metric system and vice versa
- Appropriate maintenance and storage of measuring instruments and devices

3. Do calculations.
  - Accurate calculation of areas in a drawing
  - Actual calculation of areas on site
  - Accurate calculation of proportions (fractions and percentages) involved in different recipes
  - Appropriate production of dimensioned sketches
  
4. Inspect surfaces.
  - Recognition of the type of surface
  - Recognition of flaws and imperfections in the surfaces and their probable causes
  - Performance of different tests and measurements, if applicable
  - Proper determination of corrective measures
  
5. Determine the work that needs to be done.
  - Determination of the nature and scope of the preparation and finishing work needed
  - Estimate of quantities of products and materials based on the spread rate specified in the data sheets
  - Determination of the tools and equipment required
  - Estimate of the amount of time required and determination of the schedule, taking into account the other tradespeople involved, if applicable
  - Consideration of losses associated with the different coatings and application techniques used
  - Estimate of the cost of the work
  
6. Fill out work orders.
  - Accurate record of the necessary information concerning surface areas, quantities and the necessary tools and equipment
  - Clear transmission of information to client or employer, as the case may be, and justification

*For the competency as a whole:*

- Observance of manufacturers' instructions for the products used
- Accurate measurements and calculations
- Concern for honesty and objectivity based on the job and the associated needs
- Appropriate use of trade-specific vocabulary

### Suggestions for Competency-Related Knowledge and Know-How

---

The following is a summary of the knowledge, skills, strategies, attitudes and perceptions related to each element of the competency, along with their attendant guidelines.

#### 1. Interpret drawings and specifications.

- Distinguish between the different types of drawings. Architectural, mechanical, location, etc.
- Recognize the different views. Elevation drawing, plan view, sections
- Recognize the information in a drawing. Information in the title box, legend, scale, symbols, etc.
- Recognize the different types of lines and dimensions. Contour lines, dotted lines, centre line, dimensions, etc.
- Identify the different sections of specifications. Clauses, description of work, requirements, schedule, etc.

#### 2. Take measurements.

- Distinguish between the different types of instruments and devices used by painters. Ruler, tape measure, conversion ruler, range finder, protractor, measuring wheel, wet- and dry-film thickness gauges, etc.
- Use charts for converting units from the imperial to the metric system and vice versa.

#### 3. Do calculations.

- Use a calculator.
- Apply the cross product rule. Amount of paint needed based on the spread rate and the surface area, etc.
- Apply the calculation formulas associated with different geometric shapes. Perimeter, circumference, area, etc.
- Apply the formulas associated with fractions, percentages, etc. Calculation of loss, blend ratios, recipe ratios, etc.

#### 4. Inspect surfaces.

- Be familiar with the causes of imperfections on different surfaces. Excessive humidity, efflorescence, incorrect application, incompatibility of coatings, etc.
- Detect imperfections and alterations on different surfaces. Chipping, delamination, cracking, rust, mould, etc.
- Perform tests and take measurements. Peel and humidity tests (hygrometer for metal and wood), wet- and dry-film gauges

## 5. Determine the work that needs to be done.

- Recognize the sequence for carrying out the work in a building and the different tradespeople involved. Intervention of painters with respect to other tradespeople, and impact on the work schedule
- Identify different factors that can affect the rate of product loss. Associated with spray equipment: application techniques, spray angles, excessive pressure. Loss of coverings in roll form due to architectural elements, etc.
- Prepare an invoice. Information about the client, time spent doing the work, work done, products used, additions to contract, applicable taxes, etc.

## 6. Fill out work orders.

- Consult manufacturers' catalogues and data sheets. Contract number, shipping address, acknowledgment of receipt if applicable, etc.



Competency 9      Duration 90 hours      Credits 6

## ***Behavioural Competency***

---

### **Statement of the Competency**

Install wall coverings.

### **Achievement Context**

- Working with wood, plaster, drywall, metal or synthetic walls
- Working with pre-prepared new or existing surfaces
- Given:
  - instructions or work orders
  - drawings and specifications
- Working with wall coverings such as wallpaper, vinyl coverings, metallic coverings, murals, fabrics, decorative strips or safety accessories
- Using:
  - personal and collective protective equipment
  - lifting equipment
  - hand and power tools
  - measuring instruments
  - maintenance products, cleaners and thinners
  - products and equipment for preparing and repairing surfaces
  - product technical data sheets
  - material safety data sheets
  - manufacturers' manuals

### **Elements of the Competency**

1. Plan the work.

### **Performance Criteria**

- Accurate identification of pertinent information regarding the work to be done
- Accurate evaluation of the condition of the surfaces and the preparation required
- Consideration of patterns and colour harmonies
- Determination of installation method and placement of seams
- Choice of the equipment, hand or power tools, materials, products and accessories needed for the job
- Estimate of quantities and time needed and of costs, taking into account possible losses
- Establishment of work schedule, taking into account other tradespeople, if applicable

2. Organize and prepare the work.
  - Appropriate protection of adjacent surfaces
  - Proper installation of lifting equipment, if applicable
  - Verification of materials and equipment, batch numbers and quantities of coverings
  - Determination of a logical sequence for carrying out the work
  - Appropriate sanding, cleaning and repair of surfaces
  - Application of appropriate undercoat
  - Proper preparation of the different coverings
  - Precise indication of levelling lines
3. Remove existing wall coverings and adhesives.
  - Use of appropriate methods
  - Appropriate cleaning of surfaces
4. Apply the wall coverings.
  - Verification of ventilation, air conditioning, and the humidity of the ambient air and the substrate
  - Careful and ordered setup of work area
  - Installation, smoothing and roller pressing of strips depending on the type of covering
  - Precise adjustment of patterns and edges
  - Levelling of coverings
  - Appropriate inlay of decorative coverings, if applicable
  - Careful and precise cutting of excess, and adjustment and closure of seams
  - Thorough removal of excess adhesive
  - Observance of installation time
5. Check the quality of the work.
  - Detection of any imperfections by sight and by touch
  - Application of protection, if applicable
  - Application of appropriate corrective measures, if applicable
6. Finish the work.
  - Appropriate cleaning and tidying of work area
  - Thorough cleaning, regular maintenance and storage of hand and power tools
  - Safe disposal or recycling of hazardous products and materials in accordance with environmental protection measures
  - Inclusion of the necessary information on the invoice, if applicable

*For the competency as a whole:*

- Observance of occupational health and safety rules
- Adoption of ergonomic work postures
- Appropriate clothing
- Observance of environmental protection measures
- Proper use of measuring and levelling instruments
- Observance of manufacturers' instructions
- Achievement of desired quality
- Economical use of materials
- Appropriate use of trade-specific vocabulary

### **Suggestions for Competency-Related Knowledge and Know-How**

---

The following is a summary of the knowledge, skills, strategies, attitudes and perceptions related to each element of the competency, along with their attendant guidelines.

#### 1. Plan the work.

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>• Describe the different types of coverings.</li> </ul>                         | <p>Sizes, coatings (pre-glued or not) maintenance (washable or not), finishes (vinyl, paper, metallic), backing (vinyl, paper, textile, cardboard, etc.), prints (patterned or not), physical properties (thermal insulation, soundproofing, resistant coverings), etc.</p> |
| <ul style="list-style-type: none"> <li>• Determine the starting point.</li> </ul>                                      | <p>Based on the shape of the room, obstacles, the distribution of strips and patterns, visual considerations and economy of materials<br/>Start and end points</p>  |
| <ul style="list-style-type: none"> <li>• Recognize the colours, texture and type of the existing substrate.</li> </ul> | <p>Harmony of patterns, textures, etc.</p>  |
| <ul style="list-style-type: none"> <li>• Distinguish between the different types of seams.</li> </ul>                  | <p>Overlapped (double cutting), butt (side by side), etc.</p>   |
| <ul style="list-style-type: none"> <li>• Factor in material losses based on the architectural elements.</li> </ul>     | <p>Calculation of amounts required (formulas for calculating surface area)</p>  |
| <ul style="list-style-type: none"> <li>• Distinguish between the different tools and equipment required.</li> </ul>    | <p>Directions for use<br/>Pasting machines, hand tools (trays, rollers, paintbrushes, slickers, pasting table, levelling instruments), etc.</p>   |

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>• Recognize the characteristics of adhesives.</li> </ul>   | <p>Health risks<br/>Cellulose adhesives, clay-based adhesives, wallpaper adhesives, contact cement, etc.<br/>Properties, application methods, cleaning methods, etc.</p>  |
| 2. Organize and prepare the work.   |   |
| <ul style="list-style-type: none"> <li>• Distinguish between the different types of primers.</li> </ul>   | <p>Alkyd primer, wallpaper primer, drying time</p>  |
| <ul style="list-style-type: none"> <li>• Match the batch numbers for the job.</li> </ul>  | <p>Batch numbers (incidence on manufacturing date, patterns, colours, texture, etc.)</p>  |
| <ul style="list-style-type: none"> <li>• Determine a logical sequence for carrying out the work.</li> </ul>   | <p>Based on the type of covering, the existing substrates, the dimensions of the surfaces to be covered, existing constraints, etc.</p>   |
| 3. Remove existing wall coverings and adhesives.  |   |
| <ul style="list-style-type: none"> <li>• Distinguish between the different methods of removing wall coverings.</li> </ul>                                     | <p>Dry removal, wet scraping, removal using solvent, steam stripping</p>  |
| <ul style="list-style-type: none"> <li>• Recognize stripping tools and equipment.</li> </ul>  | <p>Scrapers, spatulas, stripping machine, trays and rollers, hand-pump sprayer, etc.</p>  |
| <ul style="list-style-type: none"> <li>• Neutralize adhesive residue.</li> </ul>  | <p>Water, trisodium phosphate (TSP), sponge, sanding, etc.</p>  |
| 4. Apply the wall coverings.  |   |
| <ul style="list-style-type: none"> <li>• Be familiar with the drying times for the different coverings.</li> </ul>  | <p>Manufacturers' data sheets, specifications</p>   |
| <ul style="list-style-type: none"> <li>• Be familiar with the effect of temperature and humidity on the adhesion of the material to the substrate.</li> </ul> | <p>Verification of ventilation or air conditioning (impact on drying time)<br/>Verification of the humidity of the ambient air and the substrate</p>  |
| <ul style="list-style-type: none"> <li>• Prepare the strips.</li> </ul>   | <p>Measurements taken based on the size of the surfaces, adjustment of patterns if applicable, cutting, soaking (water temperature and soaking time) if applicable, folding of strips if applicable, numbering of strips, storage before installation, etc.</p> |
| <ul style="list-style-type: none"> <li>• Recognize the benefits of a well-organized work area.</li> </ul>   | <p>Safe arrangement of tools and equipment for purposes of efficiency, ergonomics, etc.</p>   |

## 5. Check the quality of the work.

- Distinguish between different safety accessories. Plastic, metal or plexiglas accessories
- Recognize different imperfections. Poor placement of starting point, poorly aligned strips, poorly adjusted seams or patterns, tears, air bubbles, creases, ineffective cuts (excess, insufficient amount), excess adhesive, etc.
- Distinguish between the different methods of touching up and repairing wall coverings. Patching, smoothing, removing air, adding adhesive, replacing strips, etc.



Competency 10 Duration 60 hours Credits 4

## ***Behavioural Competency***

---

### **Statement of the Competency**

Spray surfaces.

### **Achievement Context**

- Working with wood, plaster, drywall, metal, synthetic or chalky walls and ceilings
- Working with pre-prepared new or existing surfaces
- Working as a team
- Given:
  - instructions or work orders
  - drawings and specifications
- Using:
  - water- or solvent-based coatings, high-performance and ceramic-based coatings, etc.
  - personal and collective protective equipment
  - lifting equipment, if applicable
  - hand and power tools such as pneumatic pumps, pneumatic and electrostatic spray guns and compressors
  - measuring instruments
  - maintenance products, cleaners and thinners
  - products and equipment for preparing and repairing surfaces
  - product technical data sheets
  - material safety data sheets
  - manufacturers' manuals

### **Elements of the Competency**

### **Performance Criteria**

1. Plan the work.

- Accurate identification of pertinent information regarding the work to be done
- Evaluation of the condition of the surfaces and the preparation needed
- Interpretation of manufacturers' instructions
- Choice of the equipment, hand or power tools, materials, products and accessories needed for the job
- Estimate of quantities and time needed and of costs, taking into account possible losses
- Establishment of work schedule, taking into account other tradespeople, if applicable

2. Prepare and mask the surfaces.
  - Verification of ventilation, air conditioning, and the humidity of the ambient air and the substrate
  - Appropriate protection of adjacent surfaces
  - Determination of a logical sequence for carrying out the work
  - Proper installation of lifting equipment, if applicable
  - Appropriate application of masking material
  - Appropriate application of primer, if applicable
  - Appropriate sanding, cleaning and preparation of surfaces
  - Achievement of the necessary surface profile, if applicable
  
3. Spray on coatings.
  - Inspection and preparation of the necessary spray equipment
  - Use of correct spray techniques
  - Constant concern for safety
  - Observance of application time
  - Regular and consistent application of coating
  - Uniform and consistent film
  - Observance of drying time between coats
  - Subsequent rolling of surfaces, if applicable
  - Appropriate sanding between coats, if applicable
  
4. Check the quality of the work.
  - Detection of any imperfections by sight and by touch
  - Use of devices to measure the uniformity of the film (thickness, consistency) for metallic and chalky surfaces
  - Application of appropriate corrective measures, if applicable
  
5. Finish the work.
  - Methodical removal of masking material
  - Appropriate cleaning and tidying of work area
  - Thorough cleaning, regular maintenance and storage of hand and power tools
  - Safe disposal or recycling of hazardous products and materials in accordance with environmental protection measures
  - Inclusion of the necessary information on the invoice, if applicable



*For the competency as a whole:*

- Observance of occupational health and safety rules
- Adoption of ergonomic work postures
- Observance of environmental protection measures
- Coordinated and effective teamwork
- Appropriate clothing
- Observance of manufacturers' instructions
- Achievement of desired quality
- Appropriate use of trade-specific vocabulary

### **Suggestions for Competency-Related Knowledge and Know-How**

---

The following is a summary of the knowledge, skills, strategies, attitudes and perceptions related to each element of the competency, along with their attendant guidelines.

#### 1. Plan the work.

- Recognize the specific hazards inherent in the use of spray equipment and masking materials. Falls, subcutaneous injection, splashing, cuts, discomfort due to fumes, risk of fire, risk of explosion, etc.
- Identify personal and collective safety measures. Ventilation, aeration, chemical-cartridge respirators, face shield, safety glasses, protective clothing, safety perimeter, signs, etc.
- Distinguish between the different spray systems and how they are used. Conventional pneumatic spray equipment (suction, pressure, gravity), airless, low-pressure, electrostatic, etc.

#### 2. Prepare and mask the surfaces.

- Use different types of masking materials. Types of masking tape (regular, long-lasting, low-tack, etc.), paper (waxed, kraft, etc.), plastic (different thicknesses), etc.
- Use different types of masking devices. Masking tape dispenser, tape and paper dispenser, etc.

#### 3. Spray on coatings.

- Assemble the spray equipment. Choice of nozzle based on the substrate and the product used  
Choice of air cap and fluid needle based on the product used  
Use of compressor  
Assembly of equipment, loading of recipient and testing
- Prepare the paint. Dilution ratio, filtration (filters), viscosity, etc.

- Apply spray techniques.
  - Logical sequence for carrying out the work (angles, difficult-to-reach places, flat surfaces, etc.)
  - Ergonomics
  - Spraying with gun parallel to the surface
  - Distances, speeds, angles, movement, overlapping, protective screen, spray gun extensions, etc.
  
- 4. Check the quality of the work.
  - Recognize imperfections in sprayed surfaces.
    - Insufficient product, buildup, blisters, chalking, cracks, drips and sags, dirt, dust, overlap, uneven film, etc.
  
  - Correct and repair imperfections.
    - Conventional tools (paintbrushes, rollers, etc.), spray equipment, etc.
  
  - Check the thickness of the coat with thickness gauges.
    - Measurement of damp coat (chalky and metallic surfaces)
    - Measurement of dry coat (metal)
  
- 5. Finish the work.
  - Apply techniques for removing masking materials.
    - Time required to remove the materials
    - Methods of collecting and removing materials
  
  - Apply methods of cleaning and maintaining spray equipment.
    - Compatibility of solvents with the products used, lubrication, etc.

Competency 11 Duration 90 hours Credits 6

### ***Behavioural Competency***

---

#### **Statement of the Competency**

Prepare and finish chalky and synthetic surfaces.

#### **Achievement Context**

- Working with chalky or synthetic surfaces such as concrete, cement, brick, acoustic tiles or vinyl
- Working with pre-prepared new or existing horizontal or vertical surfaces
- Working as a team
- Given:
  - instructions or work orders
  - drawings and specifications
- Using:
  - interior or exterior water- or solvent-based coatings such as paint, different composites, epoxy- and ceramic-based membranes, incandescent membranes, etc.
  - personal and collective protective equipment
  - lifting equipment
  - hand tools such as paintbrushes, rollers and squeegees
  - power tools such as sanders, buffers, sandblasting machines, grinders and sprayers
  - measuring instruments
  - maintenance products, cleaners, thinners and solvents
  - products and equipment for preparing and repairing surfaces (hydraulic cement, epoxy coatings, hardeners, fillers, etc.)
  - product technical data sheets
  - material safety data sheets
  - manufacturers' manuals

#### **Elements of the Competency**

1. Plan the work.

#### **Performance Criteria**

- Accurate identification of pertinent information regarding the work to be done
- Evaluation of the condition of the surfaces and the preparation needed
- Consideration of product compatibility
- Interpretation of manufacturers' instructions
- Estimate of quantities and time needed and of costs, taking into account possible losses
- Establishment of work schedule, taking into account other tradespeople, if applicable

2. Organize the work.
  - Appropriate protection of adjacent surfaces
  - Appropriate application of masking material
  - Proper installation of lifting equipment, if applicable
  - Inspection and preparation of the necessary equipment
  - Ordered, safe and effective setup of work area
  - Determination of a logical sequence for carrying out the work
  
3. Prepare the surfaces.
  - Verification of the humidity of the ambient air and substrate
  - Application of mechanical, impact or chemical treatments to the surfaces in accordance with recognized methods
  - Appropriate repair of surfaces
  - Constant concern for safety
  - Achievement of desired surface profile, if applicable
  
4. Apply the coatings.
  - Use of appropriate application or spray techniques
  - Observance of mix ratios
  - Observance of induction and application time
  - Regular and consistent application of coating
  - Uniform and consistent film
  - Observance of drying time between coats
  - Appropriate sanding between coats, if applicable
  - Observance of manufacturers' instructions
  
5. Check the quality of the work.
  - Detection of any imperfections by sight and by touch
  - Appropriate verification of the thickness of the damp coat
  - Application of appropriate corrective measures, if applicable
  
6. Finish the work.
  - Methodical removal of masking material
  - Appropriate cleaning and tidying of work area
  - Thorough cleaning, regular maintenance and storage of hand and power tools
  - Safe disposal or recycling of hazardous products and materials in accordance with environmental protection measures
  - Inclusion of the necessary information on the invoice, if applicable

*For the competency as a whole:*

- Observance of occupational health and safety rules
- Adoption of ergonomic work postures
- Appropriate clothing
- Observance of environmental protection measures
- Coordinated and effective teamwork
- Observance of manufacturers' instructions
- Achievement of desired quality
- Appropriate use of trade-specific vocabulary

**Suggestions for Competency-Related Knowledge and Know-How**

---

The following is a summary of the knowledge, skills, strategies, attitudes and perceptions related to each element of the competency, along with their attendant guidelines.

1. Plan the work.

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>• Recognize the characteristics of chalky surfaces.</li> </ul>  | <p>Porosity of concrete, friability, cracks, efflorescence, laitance, etc.<br/>Types of finishes (rough, smooth, textured, etc.)</p> |
| <ul style="list-style-type: none"> <li>• Identify different synthetic surfaces.</li> </ul>   | <p>Melamine, ceramic, acoustic tile, etc.</p>  |
| <ul style="list-style-type: none"> <li>• Identify the equipment needed to achieve a profile.</li> </ul>  | <p>Buffers, sandblasting machines, grinders, sanders, etc.</p>   |
| <ul style="list-style-type: none"> <li>• Recognize the characteristics of synthetic surfaces.</li> </ul>   | <p>Porosity, smoothness, poor adhesion</p>   |
| <ul style="list-style-type: none"> <li>• Recognize the specific dangers inherent in the use of epoxy-based products and the equipment needed to prepare surfaces.</li> </ul> | <p>Chemical hazards, burns, eye injuries, falls, fumes, noise, dust, etc.</p>  |

2. Organize the work.

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>• Take the necessary precautions when painting floors.</li> </ul>                                       | <p>Water and dust retention, limited access, etc.</p>                             |
| <ul style="list-style-type: none"> <li>• Recognize how a work team is organized and the logical sequence for carrying out the work.</li> </ul> | <p>Application of coating with respect to the preparation of mixtures (epoxy)</p> |

3. Prepare the surfaces.

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>• Choose the profile based on the coating.</li> </ul>   | <p>Determination of thickness of coating based on adhesion (concrete surface preparation [CSP] standards)</p> |
| <ul style="list-style-type: none"> <li>• Determine the necessary surface treatment.</li> </ul> | <p>Mechanical, chemical or impact treatment</p>   |

- Recognize the need for the adequate preparation of new surfaces. Etching using hydrochloric acid  
Risk of parting compounds
  - Recognize the need for the adequate preparation of existing surfaces with and without existing coatings. Cleaning (PTS, detergent, water), degreasing, special primers for synthetic surfaces, pressure washers, sanding, spraying of sodium bicarbonate, etc.
  - Repair surfaces. Filling cracks, holes, cells, etc.
4. Apply the coatings.
- Use the equipment needed to apply coatings on chalky surfaces. Long-nap roller covers, paintbrushes, trays, spray equipment, telescopic extensions, squeegees, cleats (epoxy floor coatings), etc.
  - Use the equipment needed to apply coatings on synthetic surfaces. Roller covers, screens, paintbrushes, trays, telescopic extensions, spray equipment, etc.
5. Check the quality of the work.
- Check the adhesion of a coating on a chalky or synthetic surface. Scraping the surface, etc.

Competency 12 Duration 90 hours Credits 6

## ***Behavioural Competency***

---

### **Statement of the Competency**

Prepare and finish wood surfaces.

### **Achievement Context**

- Working with wood interior or exterior surfaces, in particular architectural elements such as mouldings, baseboards, frames, windows and doors
- Working as a team
- Given:
  - instructions or work orders
  - drawings and specifications
- Using:
  - interior or exterior water- or solvent-based coatings such as paint, stain and varnish
  - personal and collective protective equipment
  - lifting equipment
  - hand tools such as paintbrushes and rollers
  - power tools such as sanders, stripping equipment and pressure washers
  - maintenance products, cleaners, thinners, solvents, etc.
  - products and equipment for preparing and repairing surfaces
  - product technical data sheets
  - material safety data sheets
  - manufacturers' manuals

### **Elements of the Competency**

1. Plan the work.

### **Performance Criteria**

- Accurate identification of pertinent information regarding the work to be done
- Evaluation of the condition of the surfaces and the preparation needed
- Interpretation of manufacturers' instructions
- Choice of the equipment, hand or power tools, materials, products and accessories needed for the job
- Consideration of colour harmonies
- Estimate of quantities and time needed and of costs, taking into account possible losses
- Establishment of work schedule, taking into account other tradespeople, if applicable

2. Organize the work.
  - Appropriate protection of adjacent surfaces
  - Appropriate application of masking material
  - Proper installation of lifting equipment, if applicable
  - Inspection and preparation of the necessary equipment
  - Ordered, safe and effective setup of work area
  - Determination of a logical sequence for carrying out the work
  
3. Prepare the surfaces.
  - Use of recognized methods for applying mechanical or chemical treatments
  - Removal of existing caulking
  - Proper application of caulking
  - Appropriate repair of surfaces
  - Appropriate use of pressure washer
  - Appropriate sanding sequence
  - Achievement of the desired surface quality
  
4. Apply the coatings.
  - Use of appropriate application or spray techniques
  - Observance of application time
  - Regular and consistent application of coating
  - Uniform penetration of stain
  - Uniform and consistent film
  - Observance of drying time between coats
  - Appropriate sanding between coats
  - Observance of manufacturers' instructions
  
5. Check the quality of the work.
  - Detection of any visible imperfections
  - Inspection of surfaces by touch
  - Application of appropriate corrective measures, if applicable
  
6. Finish the work.
  - Methodical removal of masking material
  - Appropriate cleaning and tidying of work area
  - Basic maintenance and appropriate storage of tools, equipment and products
  - Safe disposal or recycling of hazardous products and materials in accordance with environmental protection measures
  - Inclusion of the necessary information on the invoice, if applicable



*For the competency as a whole:*

- Observance of occupational health and safety rules
- Adoption of ergonomic work postures
- Observance of environmental protection measures
- Coordinated and effective teamwork
- Appropriate clothing
- Observance of manufacturers' instructions
- Achievement of desired quality
- Appropriate use of trade-specific vocabulary

### **Suggestions for Competency-Related Knowledge and Know-How**

---

The following is a summary of the knowledge, skills, strategies, attitudes and perceptions related to each element of the competency, along with their attendant guidelines.

1. Plan the work.

- Recognize the different types of wood and their characteristics. Pine, maple, oak, etc.  
Hardness, porosity, structure, etc.
- List the different factors that foster deterioration. Climatic conditions (heat, cold, humidity)  
Surrounding environment, presence of chemical or biological agents, wear

2. Organize the work.

- Take the necessary precautions against dust. Ventilation, filter mask, etc.
- Recognize the natural colourings present in the different types of wood. Pine, cedar, mahogany, etc.
- Be familiar with the different types of sanding equipment. Electric, mechanical, pneumatic, orbital, belt, etc.

3. Prepare the surfaces.

- Recognize products used to prepare wood surfaces. Plastic wood, filler, stripper, etc.
- Remove caulking. Scraper, blade, knife, solvent, etc.
- Be familiar with sanding sequences. Rough, medium, fine, etc.
- Use different types of sanding equipment. Speed of travel, pressure, choice of abrasive, etc.
- Strip wood surfaces. Liquid or gel-based stripper  
Vertical and horizontal surfaces

- Neutralize chemicals. Water, solvent, etc.
  - Check the level of humidity of wood surfaces. Hygrometer
4. Apply the coatings.
- Apply different types of coatings. Paint, stain, wax, preservative, primer, varnish, etc.
  - Use the equipment needed to apply the coatings. Paintbrushes, rollers, trays, rags, spray guns, etc.
5. Check the quality of the work.
- Describe methods of detecting flaws and imperfections. Inspection of the quality of a finish by sight and by touch
  - Identify methods of correcting imperfections. Scraping, sanding, filling, etc.
6. Finish the work.
- Safely dispose of or recycle hazardous products and materials in accordance with environmental protection rules. Disposal of rags and hazardous materials in the appropriate hermetically sealed containers

Competency 13 Duration 90 hours Credits 6

***Behavioural Competency***

---

**Statement of the Competency**

Prepare and finish metal surfaces.

**Achievement Context**

- Working with interior or exterior ferrous and non-ferrous surfaces
- Working as a team
- Given:
  - instructions or work orders
  - drawings and specifications
  - standards for preparing metal surfaces
- Using:
  - water- or solvent-based coatings such as paint, high-performance products, ceramic-based products, etc.
  - personal and collective protective equipment
  - lifting equipment
  - hand tools such as paintbrushes and rollers
  - devices to measure the thickness of coatings on metal surfaces (mechanical and electronic thickness gauges)
  - power tools such as sanders, grinders, stripping equipment, built-in or portable sandblasting equipment, metal brushes and needle spray guns
  - maintenance products, cleaners, thinners, solvents, etc.
  - products and equipment for preparing and repairing surfaces
  - product technical data sheets
  - material safety data sheets
  - manufacturers' manuals

**Elements of the Competency****Performance Criteria**

---

1. Plan the work.

- Accurate identification of pertinent information regarding the work to be done
- Evaluation of the condition of the surfaces and the preparation needed
- Interpretation of manufacturers' instructions
- Choice of the equipment, hand or power tools, materials, products and accessories needed for the job
- Estimate of quantities and time needed and of costs, taking into account possible losses
- Establishment of work schedule, taking into account other tradespeople, if applicable

2. Organize the work.
  - Appropriate protection of adjacent surfaces
  - Appropriate application of dust collection methods
  - Determination of a logical sequence for carrying out the work
  - Ordered, safe and effective setup of work area
  - Appropriate application of masking material
  - Proper installation of lifting equipment, if applicable
  - Inspection and preparation of the necessary equipment
  
3. Prepare the surfaces.
  - Use of recognized methods for applying mechanical or chemical treatments
  - Appropriate use of abrasives
  - Appropriate use of electrostatic spray equipment
  - Appropriate repair of surfaces
  - Achievement of desired surface profile, if applicable
  
4. Apply the coatings.
  - Use of appropriate application or spray techniques
  - Observance of application time and sequence
  - Regular and consistent application of coating
  - Uniform and consistent film
  - Observance of drying time between coats
  - Appropriate sanding between coats, if applicable
  - Observance of manufacturers' directions
  
5. Check the quality of the work.
  - Detection of any visible imperfections
  - Inspection of surfaces by touch
  - Use of devices to measure the uniformity of the film (thickness, consistency)
  - Application of appropriate corrective measures, if applicable
  
6. Finish the work.
  - Methodical removal of masking material
  - Appropriate cleaning and tidying of work area
  - Thorough cleaning, regular maintenance and storage of hand and power tools
  - Safe disposal or recycling of hazardous products and materials in accordance with environmental protection measures
  - Inclusion of the necessary information on the invoice, if applicable

*For the competency as a whole:*

- Observance of occupational health and safety rules
- Adoption of ergonomic work postures
- Observance of environmental protection measures
- Coordinated and effective teamwork
- Appropriate clothing
- Observance of manufacturers' instructions
- Achievement of desired quality
- Appropriate use of trade-specific vocabulary

**Suggestions for Competency-Related Knowledge and Know-How**

---

The following is a summary of the knowledge, skills, strategies, attitudes and perceptions related to each element of the competency, along with their attendant guidelines.

1. Plan the work.

- Be familiar with the characteristics of different metals and alloys. Steel, galvanized steel, aluminum, cast iron, etc.
- Be familiar with different ways of preparing metal surfaces. Standards for the residential, commercial, institutional, industrial, civil engineering and roadworks sectors (light, commercial, near-white, white finish)
- Be familiar with the materials used to prepare metal surfaces. Body filler, etc.

2. Organize the work.

- Connect a pressure gun to the sandblasting system. Compressor, hoses, tank, nozzles, filters, personal protective equipment, etc.

3. Prepare the surfaces.

- Recognize the methods used to prepare metal surfaces. Chemical methods (phosphoric acid, stripper), mechanical methods (brushes, grinders, etc.) and impact methods (sandblasting)
- Choose the abrasive based on the surface to be repaired. Depending on the hardness of the metal or alloy, the desired profile or the existing coating
- Use sandblasting equipment. Directions for use, compressor, choice of nozzles, distance, speed, safety rules (uniform, sandblasting helmet, gloves), etc.
- Use manual and mechanized equipment. Grinders, brushes, scrapers, sandpaper, etc.

- Recognize the different primers for metal surfaces.

Antirust products, products for galvanized metal, products to be applied directly to the metal (DSM), etc.
- 4. Apply the coatings.

  - Make an effort to prevent the appearance or spread of rust on ferrous metal surfaces.

Sealers, inhibitors, additives, antirust products, etc.
  - Make an effort to obtain the appropriate film for the conditions to which the coating will be exposed.

Saline environment, presence of chemicals, environmental conditions
- 5. Check the quality of the work.

  - Use instruments to measure the thickness and uniformity of the coating.

Dry-film thickness gauge, sponge to detect imperfections, etc.
  - Use repair methods.

Application of a new coat (by section) meeting quality criteria

Competency 14 Duration 90 hours Credits 6

## ***Behavioural Competency***

---

### **Statement of the Competency**

Create decorative effects and special finishes.

### **Achievement Context**

- In order to reproduce letters, numbers, geometric shapes, logos, drawings, lines, decorative strips or graphics
- Working indoors or outdoors, in full scale or using a projector
- Working alone or in a team
- Given:
  - instructions or work orders
  - drawings and specifications
- Using:
  - water- or solvent-based interior or exterior coatings such as paint, stain, varnish, glaze, colourings, metal coatings or textured wall coverings
  - personal and collective protective equipment
  - lifting equipment
  - hand tools such as paintbrushes, rollers, stencils, rockers, trowels, badger brushes, styluses, texture rollers, Venetian plaster spatulas, rags and airbrush sponges
  - drawing instruments, projectors, etc.
  - maintenance products, cleaners, thinners, solvents, etc.
  - primers and equipment and products for preparing and repairing surfaces
  - product technical data sheets
  - material safety data sheets
  - manufacturers' manuals

**Elements of the Competency****Performance Criteria**

- | Elements of the Competency  | Performance Criteria  |
|---|---|
| 1. Plan the work.   | <ul style="list-style-type: none"> <li>• Accurate identification of pertinent information regarding the work to be done</li> <li>• Evaluation of the condition of the surfaces and the preparation needed</li> <li>• Interpretation of manufacturers' instructions</li> <li>• Consideration of colour harmonies</li> <li>• Choice of the equipment, hand or power tools, materials, products and accessories needed for the job</li> <li>• Estimate of quantities and time needed and of costs, taking into account possible losses</li> <li>• Establishment of work schedule, taking into account other tradespeople, if applicable</li> </ul> |
| 2. Organize the work.   | <ul style="list-style-type: none"> <li>• Appropriate protection of adjacent surfaces</li> <li>• Appropriate application of masking material</li> <li>• Proper installation of lifting equipment, if applicable</li> <li>• Inspection and preparation of the necessary equipment</li> <li>• Determination of a logical sequence for carrying out the work, based on the desired colours, shapes and effect, etc.</li> <li>• Appropriate preparation and repair of surfaces</li> <li>• Appropriate application of compatible primer</li> </ul>  |
| 3. Trace shapes and graphics.   | <ul style="list-style-type: none"> <li>• Evaluation of reproduction or marking possibilities given the available space</li> <li>• Correct placement of stencil, if applicable</li> <li>• Observance of established reference points</li> <li>• Choice of tracing method: full scale or using a projector</li> <li>• Tracing of shapes and precise masking of outline, if applicable</li> <li>• Appropriate application of paint or other coating in accordance with the established sequence</li> <li>• Appropriate application of protective coating, if applicable</li> </ul>   |
| 4. Create faux finishes: <ul style="list-style-type: none"> <li>• marble</li> <li>• wood</li> <li>• brick</li> <li>• metal</li> <li>• different textures, etc.</li> </ul> | <ul style="list-style-type: none"> <li>• Appropriate preparation of products such as glaze, paint and colourings</li> <li>• Achievement of desired effect (opaque or translucent finish)</li> </ul>   |



5. Create decorative effects.
  - Appropriate use of positive and negative techniques (opaque and translucent finishes)
  - Appropriate preparation of products such as glaze, paint, colourings and cracking products
  - Appropriate production or use of a stencil
  - Appropriate application of decorative coatings
  
6. Apply metallic finishes:
  - gold
  - silver
  - aluminum
  - bronze, etc.
  
7. Check the quality of the work.
  - Detection of any visible imperfections
  - Inspection of surfaces by touch
  - Application of appropriate corrective measures, if applicable
  
8. Finish the work.
  - Methodical removal of masking material
  - Appropriate cleaning and tidying of work area
  - Thorough cleaning, regular maintenance and storage of hand and power tools
  - Safe disposal or recycling of hazardous products and materials in accordance with environmental protection measures
  - Inclusion of the necessary information on the invoice, if applicable

*For the competency as a whole:*

- Observance of occupational health and safety rules
- Adoption of ergonomic work postures
- Observance of environmental protection measures
- Coordinated and effective teamwork
- Appropriate clothing
- Harmony of colours and textures
- Observance of manufacturers' instructions
- Achievement of desired quality
- Appropriate use of trade-specific vocabulary

### Suggestions for Competency-Related Knowledge and Know-How

---

The following is a summary of the knowledge, skills, strategies, attitudes and perceptions related to each element of the competency, along with their attendant guidelines.

#### 1. Plan the work.

- Keep abreast of decorative trends. Basic principles of decoration (colour harmony, etc.)
- Recognize the main qualities of aesthetic design. Lighting, space, etc.

#### 2. Organize the work.

- Identify the products needed for the desired effect. Paints, glazes, coatings, varnishes, Venetian plaster, etc.

#### 3. Trace shapes and graphics.

- Be familiar with projection techniques. Use of overhead projector
- Trace full-scale shapes and graphics. Use of rulers, compasses, tape measures, beam compass, levels, etc.

#### 4. Create faux finishes:

- marble
- wood
- brick
- metal
- different textures, etc.
- Be familiar with the techniques needed to achieve the desired effects. Proportions of products to mix  
Colour scheme  
Sequence of colours to be applied  
Tools needed to achieve the desired effect
- Handle tools to achieve the desired faux finish. Rocker, stylus, marbling brush, pen, sponge, plastic film, rags, spatulas, decorative texture rollers, etc.

#### 5. Create decorative effects.

- Be familiar with positive application techniques. Products: glaze, paint, etc.  
Tools: sea sponges, texture rollers, faux rollers, stencils, rags, etc.
- Be familiar with negative application techniques. Products: glaze, paint, etc.  
Tools: sea sponges, plastic film, rags
- Handle tools to achieve decorative effects.

## 6. Apply metallic finishes:

- gold
- silver
- aluminum
- bronze, etc.
- Recognize methods of applying metallic finishes with respect to the built environment. Historic elements  
Churches, historic buildings, museums, etc.
- Recognize products that can substitute for gold leaf. Bronze paint, brass leaf
- Recognize products that can substitute for silver leaf. Aluminum
- Recognize the different tools and methods used to apply metallic finishes.

## 7. Check the quality of the work.

- Recognize the qualities needed to achieve the desired effect. Uniformity, consistency, etc.

## 8. Finish the work.

- Recognize the importance of storing equipment and products properly. Stencils, special brushes, etc.  
Containers properly closed, observance of appropriate storage temperature, etc.



Competency 15 Duration 15 hours Credit 1

## ***Situational Competency***

---

### **Statement of the Competency**

Become familiar with the organizations involved in the construction industry.

### **Elements of the Competency**

- Learn about the construction industry.
- Learn about the role and importance of the organizations involved in the industry.
- Form a realistic impression of labour relations in the industry.

### **Learning Context**

---

#### **Information Phase**

- Learning about the construction industry.
- Learning about the roles and responsibilities of the organizations involved in the construction industry (e.g. management and union associations, CCQ, CSST).
- Learning about labour relations in the construction industry.

#### **Participation Phase**

- Participating in activities aimed at understanding:
  - the development and future of the construction industry
  - the interdependence of the different trades and occupations
  - the effects of regulation on the labour system in the industry
- Exploring the possibility of continuing training for workers in the industry.

#### **Synthesis Phase**

- Presenting a report containing a summary of the learning they acquired, as well as an assessment of its impact on their career path.

### **Instructional Guidelines**

---

- Make available all pertinent sources of information.
- Make extensive use of learning situations that are representative of the situation in the construction industry.
- Encourage students to share their opinions and express themselves.
- Guide students in preparing their summary by providing them with appropriate tools (e.g. a questionnaire).

### **Participation Criteria**

---

#### **Information Phase**

- Consult available sources of information.

**Participation Phase**

- Participate actively and consistently in the suggested activities.

**Synthesis Phase**

- Present a report containing a summary of the learning they have acquired, as well as an assessment of its impact on their career path.

**Suggestions for Competency-Related Knowledge and Know-How**

The following is a summary of the knowledge, skills, strategies, attitudes and perceptions related to each phase of the learning context, along with their attendant guidelines.

**Information Phase**

- |  |  |
|--|--|
| • Identify the specific characteristics of the construction industry.                      | Characteristics and economic importance  |
| • Identify the different employer associations.  | Roles and responsibilities<br>Association de la construction du Québec, Association des constructeurs de routes et grands travaux du Québec, Association des entrepreneurs en construction du Québec, Association provinciale des constructeurs d'habitations du Québec, Corporation des maîtres électriciens du Québec, Corporation des maîtres mécaniciens en tuyauterie du Québec |
| • Identify the different unions.   | Roles and responsibilities<br>Fédération des travailleurs du Québec, Conseil provincial du Québec des métiers de la construction, Centrale des syndicats démocratiques, Confédération des syndicats nationaux, Syndicat québécois de la construction   |
| • Recognize the role and responsibilities of the Commission des relations du travail.      | Structure, composition, functions and powers in the construction industry  |
| • Recognize the role and responsibilities of the Régie du bâtiment du Québec.              | Structure, composition, functions and powers   |
| • Recognize the role and responsibilities of the Commission de la construction du Québec.  | Structure, composition, functions and powers   |
| • Recognize the role and responsibilities of occupational health and safety organizations. | CSST and Association sectorielle paritaire<br>Structure, composition, functions and powers   |

**Participation Phase**

- |   |   |
|---|---|
| • Make an effort to share their opinions with other students. | Usefulness of discussion, attitude toward differing opinions, usefulness in the practice of the trade |
| • Distinguish between trades and occupations.                 | Distinguishing criteria and characteristics   |

- Identify the different sectoral collective agreements. Residential, commercial, institutional, industrial, civil engineering and roadworks sectors
- Recognize the laws and regulations governing labour relations in the construction industry. Purpose and impact on working conditions  
*Act respecting labour relations, vocational training and workforce management in the construction industry (R.S.Q., c. R-20)*  
*Regulation respecting the vocational training of workforce in the construction industry*  
*Regulation respecting complementary social benefit plans in the construction industry*
- Recognize the advantages of training funds. Construction industry training fund  
Training plan concerning development and retraining for the purpose of improving the income and employment of residential sector workers





Competency 16 Duration 15 hours Credit 1

## ***Situational Competency***

---

### **Statement of the Competency**

Prepare to enter the work force.

### **Elements of the Competency**

- Consult sources of information.
- Plan a job search.
- Prepare for a job search.

### **Learning Context**

---

#### **Information Phase**

- Learning about the legal requirements for practising the trade.
- Learning about available sources of information for the job search.
- Learning about the different parts of a résumé.
- Learning about strengths to emphasize and the pitfalls to avoid in a selection interview.
- Learning about the job market from potential employers and unions in the construction industry.
- Exploring the potential for entrepreneurship in the field of commercial and residential painting.

#### **Participation Phase**

- Examining different types of résumés and cover letters.
- Determining which workplaces correspond to their areas of interest.
- Identifying the steps in the job search process.
- Participating in simulated interviews in person and over the phone.

#### **Synthesis Phase**

- Analyzing their strengths and limitations with respect to their job search.
- Listing ways of overcoming their limitations.
- Presenting a summary of their thought process.

**Instructional Guidelines**

---

- Make available all pertinent sources of information.
- Moderate group discussions.
- Organize meetings with representatives from the construction sector and other sectors, and the residential, commercial, institutional, industrial, civil engineering and roadworks sectors.
- Encourage students to participate and express themselves.
- Encourage students to take the exercises seriously and to respect others.
- Encourage self-criticism.

**Participation Criteria**

---

**Information Phase**

- Consult available sources of information.
- Participate in discussions with representatives and other students.

**Participation Phase**

- Participate in activities.
- Draft a job search plan based on their preferences and interests.

**Synthesis Phase**

- Present a summary of their thought process.

**Suggestions for Competency-Related Knowledge and Know-How**

---

The following is a summary of the knowledge, skills, strategies, attitudes and perceptions related to each phase of the learning context, along with their attendant guidelines.

Information Phase

- Gather data on the topics to be covered.

Types of résumés and cover letters, job searches on the Internet, etc.  
 Legal provisions governing the trade in the construction and other sectors, and in the residential, commercial, institutional, industrial, civil engineering and roadworks sectors

- Analyze job offers.

Training and experience required  
 Comparison with their career goals

Participation Phase

- Understand the importance of preparing for an interview.

Presentation, appropriate answers, dress, behaviours to adopt and avoid, etc.





Achieve Succeed Exercise Share Read Learn Persevere