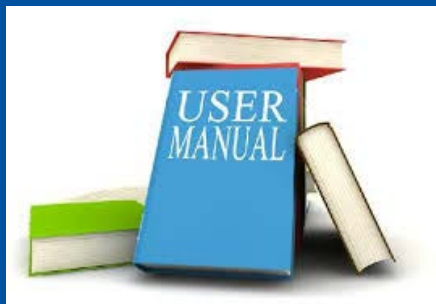


*DECP's guide to analyse skills  
gaps  
for employers' organisations*



# Part A. Discovering skills gaps





Get started!



# 1. First explorations

- Are labour market research reports on a national level available? Good. They most probably are rich, informative sources. But if they are not available, don't wait for them
- Choose for an identification of skills gaps with focus. Good indications are (nearly) as good as statistical significance
- Even if research reports on a national level are available, it will be a good next step to explore skills gaps in focused areas



## 2. Select 2 or 3 promising economic sectors

Possible criteria:

- They are important for national or regional economy
- They have the potential to grow
- There are both large companies and SME's active in this field
- They most probably suffer from skills gaps





### 3. Select one of these sectors to start with

- Select 7-10 companies
- 2 or 3 larger companies that are illustrative for the sector
- 5-7 smaller companies
- Invite the decision makers for a round table discussion
- This should be CEO's or company owners together with an HR officer or production manager



# The round table session





# Step 1: Identify a long list

- Use a brainstorm approach to identify 10 functions for which in general it is difficult to find qualified employees
- Do all participants agree? Okay!





## Step 2: Select a short list

- What are the three most crucial functions for which it is difficult to find qualified employees?
- Use ranking lists per participant. Have them first fill in separately. Then rank a top three



## Step 3: Identify tasks

- Identify the most important tasks for each function
- For each function, list 10 tasks that the participants agree on



## Step 4: Identify crucial competencies

- What do these employees have to know? (knowledge)
- What do these employees have to be able to? (skills)
- What kind of working attitude is essential? (attitude)



# Intermezzo: get inspired by .....

- <https://www.onetonline.org/>
- [www.jobsandskills.wa.gov.au](http://www.jobsandskills.wa.gov.au)
- [www.prospect.ac.uk](http://www.prospect.ac.uk)

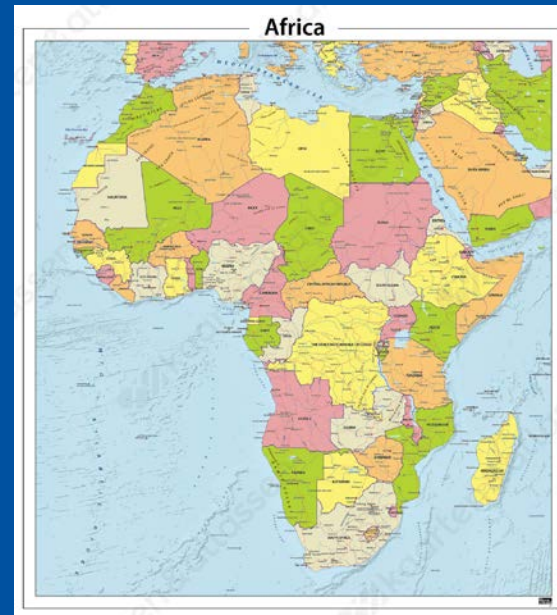
**Let us do an exercise and compare our outcomes with the outcomes of those who have already taken these steps!**



# Be smart and use existing sources as much as possible

They most probably complete the results of the round table with regards to:

- Tasks
- Technology skills
- Knowledge
- Skills
- Abilities
- Work activities
- Detailed work abilities
- Work context
- Job zone
- Education
- And more





## Step 5: Draw up a list of competencies that are lacking structurally

Here a group discussion will reveal the most important skills gaps perceived by employers. Asking questions like:





- How do you notice these competencies are lacking?
- What goes wrong if you have incompetent employees do these tasks?
- Can you give some examples how things went wrong?
- What can you do (what have you done) to overcome this disadvantage?
- Which employees in your organisation do have the right competencies?
- What can they do to coach new entrants and existing employees to their level?





# The result of this round table session:

- A good indication of the competence needs of the sector
- Complete insight in crucial functions in the companies
- Complete job profiles
- An overview of missing competencies
- This picture is shared and understood by those who ‘designed’ it
- The nature of the problem is revealed
- The employers’ organisation can share this result with their stakeholders
- And ..... **this activity opens the door** to create solutions!







## Part B. Taking action to fill in important gaps

- Mapping
- Diagnosing
- Developing
- Continuous improvement

# Let us just imagine that .....

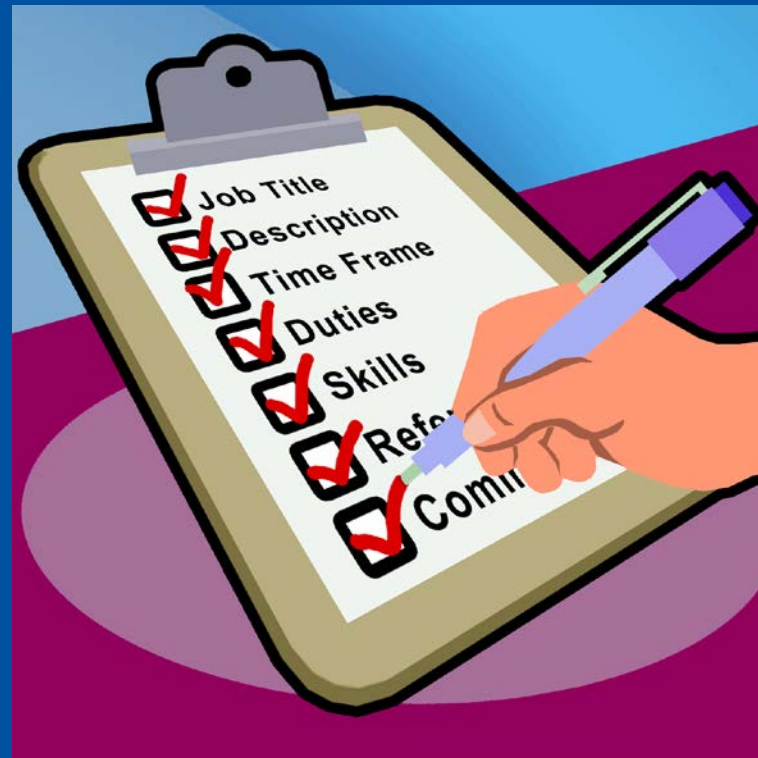
The majority of companies have identified .....

**The maintenance  
worker, machinery!!!**



..... as an important function for which new entrants lack crucial competencies

# Step 1. Mapping



# Create the job profile

- Maintenance workers undertake scheduled and breakdown maintenance of machinery and other mechanical equipment (simplified)





# What does a maintenance worker do?

- Inspect, operate, or test machinery or equipment to diagnose machine malfunctions.
- Dismantle machines, equipment, or devices to access and remove defective parts, using hoists, cranes, hand tools, or power tools.
- Perform routine maintenance, such as inspecting drives, motors, or belts, checking fluid levels, replacing filters, or doing other preventive maintenance actions.
- Diagnose mechanical problems and determine how to correct them, checking blueprints, repair manuals, or parts catalogs, as necessary.
- Repair machines, equipment, or structures, using tools such as hammers, hoists, saws, drills, wrenches, or equipment such as precision measuring instruments or electrical or electronic testing devices



# Required knowledge

- **Mechanical** — Knowledge of machines and tools, including their designs, uses, repair, and maintenance.
- **Building and Construction** — Knowledge of materials, methods, and the tools involved in the construction or repair of houses, buildings, or other structures such as highways and roads.
- **Customer and Personal Service** — Knowledge of principles and processes for providing customer and personal services. This includes customer needs assessment, meeting quality standards for services, and evaluation of customer satisfaction.
- **Public Safety and Security** — Knowledge of relevant equipment, policies, procedures, and strategies to promote effective local, state, or national security operations for the protection of people, data, property, and institutions.
- **English Language** — Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar.



# Required skills

- **Equipment Maintenance** — Performing routine maintenance on equipment and determining when and what kind of maintenance is needed.
- **Repairing** — Repairing machines or systems using the needed tools.
- **Troubleshooting** — Determining causes of operating errors and deciding what to do about it.
- **Critical Thinking** — Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.
- **Equipment Selection** — Determining the kind of tools and equipment needed to do a job.





# Required attitude

- **Flexible** — Ready to do the job whenever it is necessary
- **Proactive** — Trying to understand what work should be done later
- **Customer friendly (or oriented)** — Good listener, asks searching questions
- **Curious** — Wants to learn, takes action to do so
- **Receptive for feedback** — Is open minded to the opinion and perception of others



# To what extend?

		Absent	Basic	Intermediate	Advanced	Expert
<b>Knowledge</b>	<b>Mechanical</b>					
<b>Knowledge</b>	<b>Building and construction</b>					
<b>Knowledge</b>	<b>Customer and personal service</b>					
<b>Knowledge</b>	<b>Public safety and security</b>					
<b>knowledge</b>	<b>English language</b>					
<b>Skills</b>	<b>Equipment maintenance</b>					
<b>Skills</b>	<b>Repairing</b>					
<b>Skills</b>	<b>Trouble shooting</b>					
<b>Skills</b>	<b>Critical thinking</b>					
<b>Skills</b>	<b>Equipment selection</b>					
<b>Attitude</b>	<b>Flexible</b>					
<b>Attitude</b>	<b>Proactive</b>					
<b>Attitude</b>	<b>Customer friendly</b>					
<b>Attitude</b>	<b>Curious</b>					
<b>Attitude</b>	<b>Receptive for feedback</b>					



# The new entrants' minimum competence profile

		Absent	Basic	Intermediate	Advanced	Expert
<b>Knowledge</b>	<b>Mechanical</b>			X		
<b>Knowledge</b>	<b>Building and construction</b>			X		
<b>Knowledge</b>	<b>Customer and personal service</b>		X			
<b>Knowledge</b>	<b>Public safety and security</b>				X	
<b>knowledge</b>	<b>English language</b>			X		
<b>Skills</b>	<b>Equipment maintenance</b>		X			
<b>Skills</b>	<b>Repairing</b>		X			
<b>Skills</b>	<b>Trouble shooting</b>		X			
<b>Skills</b>	<b>Critical thinking</b>		X			
<b>Skills</b>	<b>Equipment selection</b>			X		
<b>Attitude</b>	<b>Flexible</b>			X		
<b>Attitude</b>	<b>Proactive</b>		X			
<b>Attitude</b>	<b>Customer friendly</b>			X		
<b>Attitude</b>	<b>Curious</b>				X	
<b>Attitude</b>	<b>Receptive for feedback</b>				X	



## Step 2. Diagnosing

- Discuss general experiences in the round table
- Set-up a competence profile which is generally observed for new entrants in reality
- Identify the main lacking competencies
- List the competencies that are crucial for getting started



# Generally observed new entrants' competence profile

		Absent	Basic	Intermediate	Advanced	Expert
Knowledge	Mechanical		X	X		
Knowledge	Building and construction		X	X		
Knowledge	Customer and personal service	X	X			
Knowledge	Public safety and security			X	X	
knowledge	English language			X		
Skills	Equipment maintenance	X	X			
Skills	Repairing		X			
Skills	Trouble shooting		X			
Skills	Critical thinking	X	X			
Skills	Equipment selection			X		
Attitude	Flexible			X		
Attitude	Proactive		X			
Attitude	Customer friendly		X	X		
Attitude	Curious			X	X	
Attitude	Receptive for feedback				X	



# How to measure the individuals competence profile?

- Knowledge

- how does the curriculum of the VET school look like?
- asking questions to the applicant
- structural interview with the applicant

- Skills

- have the candidate do some practical exercises
- give the applicant specific tasks
- have the applicant follow the STAR method:



# Basics of the STAR method

- S**ituation : Describe the situation
- T**ask : Explain the objective of the task
- A**ction : What did you do to achieve the objective? Why?
- R**esult : What were the outcomes of your actions?



# And what about **attitude**?

- Let us face the truth. We cannot measure everything. But.....
- A mature expert who knows people can be an excellent judge of character!
- So: make sure you involve mature experts in the selection process and share his impressions and observations
- All together this can lead to a personalised competence profile:





# Competence profile of an individual applicant

		Absent	Basic	Intermediate	Advanced	Expert
<b>Knowledge</b>	<b>Mechanical</b>		X	X		
<b>Knowledge</b>	<b>Building and construction</b>		X	X		
<b>Knowledge</b>	<b>Customer and personal service</b>		X	X		
<b>Knowledge</b>	<b>Public safety and security</b>		X		X	
<b>knowledge</b>	<b>English language</b>		X	X		
<b>Skills</b>	<b>Equipment maintenance</b>	X	X			
<b>Skills</b>	<b>Repairing</b>		X			
<b>Skills</b>	<b>Trouble shooting</b>	X	X			
<b>Skills</b>	<b>Critical thinking</b>		X	X		
<b>Skills</b>	<b>Equipment selection</b>		X	X		
<b>Attitude</b>	<b>Flexible</b>			X		
<b>Attitude</b>	<b>Proactive</b>		X	X		
<b>Attitude</b>	<b>Customer friendly</b>			X		
<b>Attitude</b>	<b>Curious</b>			X	X	
<b>Attitude</b>	<b>Receptive for feedback</b>			X	X	

# Step 3. Developing

- Who?
- How?
- What?
- Investments, resources and restrictions
- Risks and opportunities



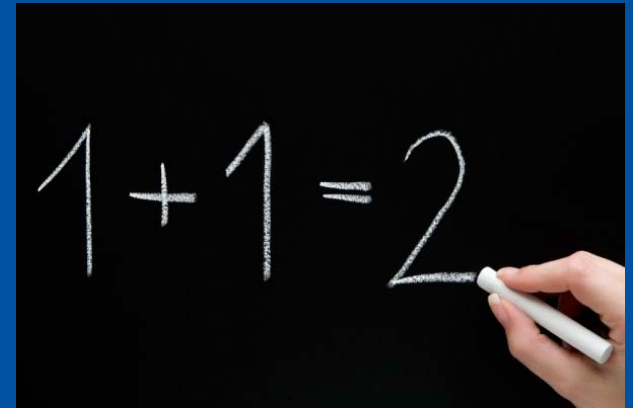
# Who?

- Can individual companies who share the same problems and challenges cooperate to work out solutions?
- Can the employers' organisation start up and support this process?
- What should –at the end- be the role of the public educational system (schools) and the government?



# How?

- Keep it as simple as possible
- Define the most important lacks of knowledge, skills and attitudes
- Identify a group of relevant experts employed by the companies that work together
- Question: what can you do to make them work together and act like ‘teachers’ ?



# What?

You remember those fields of competences?

- Knowledge
- Skills
- Attitude



# Investments, resources and restrictions

Let us discuss what is possible:

- Time, people, equipment
- Assessments, interview structure, practical exercises
- A training programme to teach and train the most important competences





# Risks and opportunities

- Trust versus mistrust
- Equal investments or not? Large companies versus SME's
- Who will benefit at the end?
- What can we do to make everybody win?
- How to get started? !!!!





# Step 4. Continuous improvement

And what if you are successful?

- Companies are no schools after all
- You can only solve a small part of the problem
- Upscaling will be difficult

So.....



# Discussion / exercise

- How to involve schools and government in each stage of this process?
- How to make three parties dance the tango?

