YES I CAN!

Assessing my doctoral skills

UCLouvain

PhDs @Work

SUMMARY

WHY AND HOW TO USE THIS BROCHURE

The 'Yes I can! Assessing my skills' brochure was developed as part of the PhDs@Work project funded by the Walloon Region. A 2017-20 partnership of Wallonia-Brussels Federation universities and the non-profit association Focus Research, the project has aimed to strengthen and enhance the transversal skills of PhD students and young doctors in order to optimise the rate and quality of their employability.

Career counsellors are unanimous: the more effectively students anticipate life after their PhD, the more they're likely to find a job that meets their requirements. Therefore, searching for a job must be carried out on the basis of **informed consideration of the skills** that will help build your desired **career**.

The purpose of this brochure is to provide the tools necessary to carry out a **skills assessment** within the PhD framework. In all, **six assessment tools** were selected: four in French and two in English. Three are completed online and three must be downloaded: there's something for everyone! All six have been tested, especially at the UCLouvain Skills@Work workshops whose purpose was to highlight the strengths and weaknesses of each, and to clarify PhD student skills assessment expectations.

The goal was to enable you to choose, either on your own or in a course context, the tool that suits you best!

This brochure has been designed to help you in your approach and offers a starting point in the tools:

- Each tool is presented and a link provided (for use online or after download).
  Advantages and disadvantages are listed, based on the
- comments of PhD candidates who tested the tools.
  All tools are accompanied by advice on their use in the
- PhD programme (at the beginning, middle or end).

You can use this brochure on your own or with guidance, depending on your needs and desires. The brochure ends with possible next steps following your skills assessment!

THREE TIPS:

- Take your *time*, regardless of assessment's length! Your assessment must be the result of genuine reflection.
- Be *realistic*: don't underestimate or overestimate yourself – neither is in your interest!
- Assessing your skills does not mean measuring your *interest* in carrying out a task but rather your *ability* to carry it out!

1.

KNOWING YOUR SKILLS
TO BETTER PROMOTE THEM:
AN INTERNATIONAL, SOCIAL
AND INDIVIDUAL CHALLENGE!

YES ¡ CAN!

Knowing your skills to better promote them: an international, social and individual challenge!

The question of what a doctor's skills are has long been the subject of attention throughout the (academic) world. Indeed, for many years now transversal skills have been at the heart of thinking about the **purpose of the PhD**, essentially with a view to employment. Making the most of the skills imparted by the PhD makes it possible to enhance the degree as such!

Right, but ... what are '**transversal skills**'? First of all, it must be understood that a skill is knowledge – a capacity that has been put into **action** – which includes both know-how and interpersonal skills, but what really makes action possible is **knowing what to do**. For example, team management skills can be activated only from the moment a team is managed, and in the same way foreign language skills can only appear from the moment a language is practised. Within the PhD framework, a transversal skill is expertise derived from the PhD **experience** but which can go beyond it and be mobilised in **other professional situations** (for example, public speaking).

> Transversal skills complement the set of scientific expertise and techniques acquired during your PhD !

Knowing your skills is to take stock of those you have **acquired** and identify the context in which you acquired them, with a view to being able not only to **mobilise** them but to **promote** them to an employer or a funder. This in turn makes it possible to identify points for improvement and thus skills yet **to be acquired**. Knowing your skills portfolio is useful at all stages of your career!

AN INTERNATIONAL CHALLENGE

Numerous skills guide, reference sources, reports, studies and other publications have emerged internationally to raise awareness among both graduates and managers of their transversal skills. In addition to being transferable, most skills developed during the PhD are universal and, while differences exist depending on the particular PhD programme, PhD skills reference sources are designed to echo the experience of all PhD students!

A GLOBAL COMMITMENT! ULAVAL AT A GLANCE

At Laval University (Canada), recognising and mobilising skills is such a major issue that the Faculty of Graduate and Postdoctoral Studies developed a specific 45-hour course: 'Recognising and enhancing your professional potential: skills assessment'. The objective is to identify and define skills imparted by master's and PhD programmes.

YES ¡CAN!

Knowing your skills to better promote them: an international, social and individual challenge!

Many discussions have taken place at European level, including at the EUA Council for Doctoral Education and, more recently, the Association for Professionals in Doctoral Education (PRIDE) and the European Council of Doctoral Candidates and Junior Researchers (Eurodoc). Additionally, the European Union created Euraxess-Researchers in Motion, which centralises career opportunities for PhD profiles in Europe and around the world. As was shown in one of the latest reports by the Organisation for Economic Co-operation and Development, thanks to this increased attention from the major players in (especially doctoral) education, the topic of transversal skills is of growing importance in government and institutional discussions. Emphasising transversal training in PhD programmes is a strategy being deployed internationally!

Certain resources can help formulate questions related to the notions of competence and career objectives and provide comprehensive frames of reference crucial to the process of assessing one's own skills. You can consult such resources both upstream (reflecting on the concept of skills, asking why a self-assessment is necessary, etc.) and downstream (interpreting self-assessment results, describing skills, etc.).

Professional skills should no longer be considered 'collateral benefits of a successful career'.

THE FRENCH CASE: A LEGISLATIVE STEP FORWARD

In France, a 22 February 2019 decree identifies PhD graduate skills by defining six blocks: research project design, implementation, communication, promotion, teaching, and team management. Is this a step toward companies recognising the PhD?

For example, a study that culminated in the '**Career**' report referenced above (Adoc Talent Management, 2012) aimed to strengthen the mutual attractiveness between PhD holders and companies by trying to reduce grey areas and lack of knowledge between them: getting to know each other better in order to collaborate better.
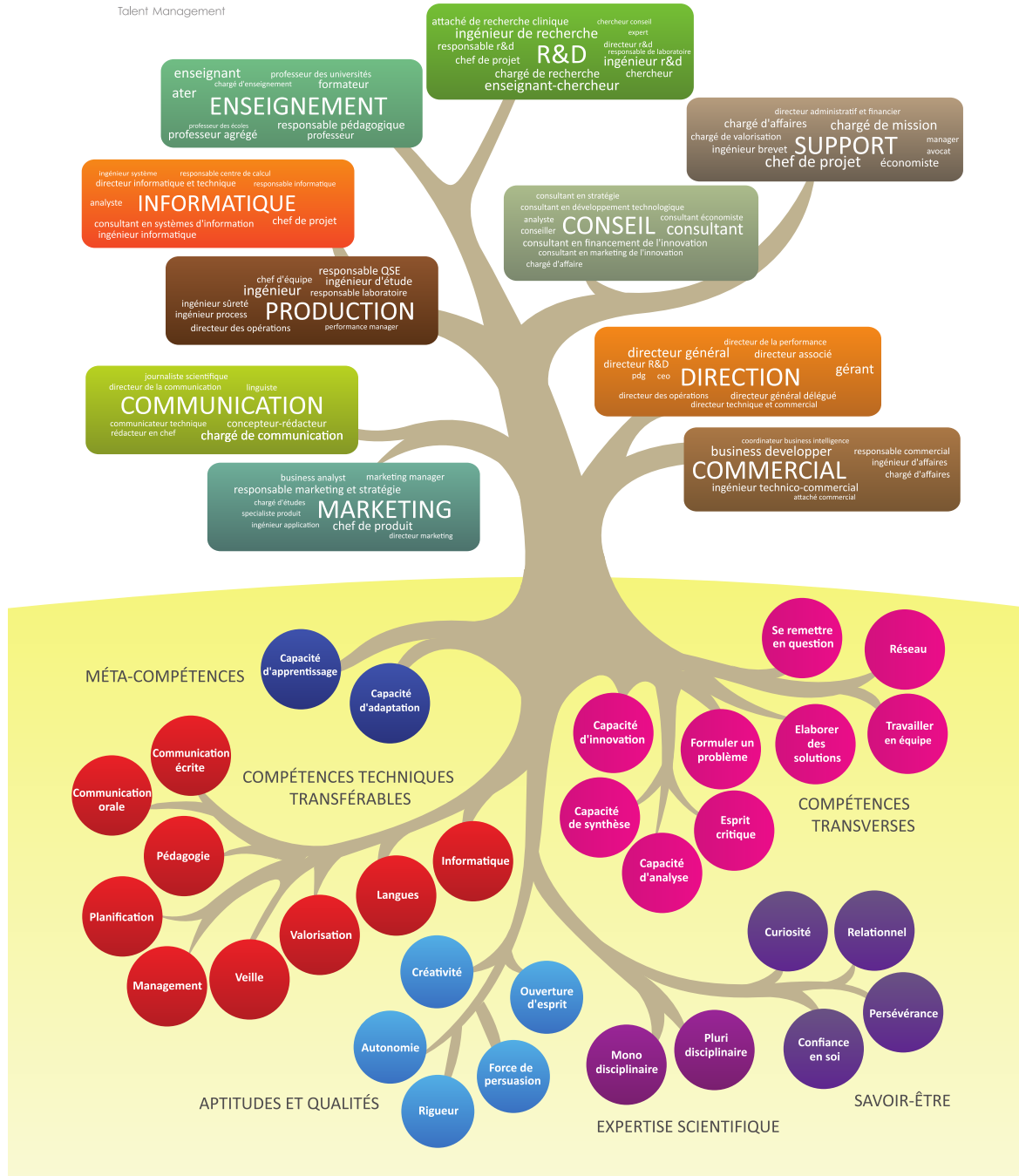
Highlighting the genuine social challenge of the transversality and transferability of skills, the report identifies six skill blocks: meta-skills, transferable technical skills, transversal skills, aptitudes, scientific expertise, and interpersonal skills.

The report's originality doesn't lie so much in identifying skills but in highlighting what sets doctors apart: their **accumulation** of **skills**. Doctors' range of skills makes them unique and demands that they play a greater role in society.

A SOCIAL CHALLENGE

Meeting the challenge of getting transversal skills recognised requires guaranteeing proper integration of doctors into the socio-economic fabric and absorbing the growing number of PhD graduates ('Career' report, Adoc Talent Management, 2012, p. 8). With a view to limiting detrimental effects caused by alleged inadequacy of PhD training relative to professional requirements, PhD-related actors across the board recognise the urgency of **strengthening** and **promoting skills** by integrating them more effectively into PhD programmes, as mentioned above.

Knowing your skills to better promote them: an international, social and individual challenge!

DOCTEURS :
DE MULTIPLES COMPÉTENCES, DES MÉTIERS VARIÉS !

Document from Career: Barthélémy Durette, Marina Fournier and Matthieu Lafon, Compétences et employabilité des docteurs; rapport d'enquête CAREER, Adoc Talent Management Paris, 2012 (download diagram).

YES ˋ CAN!

Knowing your skills to better promote them: an international, social and individual challenge!

AN INDIVIDUAL CHALLENGE

It is therefore obvious that the question of transversal skills must be taken into account and discussed both structurally and institutionally, but we must not forget the personal aspect, which, although essential, is often forgotten in the numerous reports defining the place of transversal skills in young researchers' careers.

Knowing what you are capable of can improve your **self-confidence** and eliminate a certain form of isolation that is common among PhD candidates. This came up repeatedly among the people encountered during the writing of this brochure: knowing your skills allows you to situate yourself, take stock of skills you either consciously and unconsciously possess, and minimise the infamous sense of imposture felt by a significant number of young researchers. Feeling at ease and like you belong, allowing yourself to emphasise the positive are some of the many personally beneficial effects of completing your skills assessment.

SOUND CONVINCING?

> A skill refers to putting an ability into action, to mobilising resources.

NO LIMITS !

Before beginning your skills assessment, don't hesitate to take stock of your knowledge!
To do so, go to → **this link** ←
Developed within the Euraxess framework, the No Limits platform helps you build the skills profile for your discipline and thus identifies needs in terms of your knowledge of the discipline's subject matter. The platform also offers, via a quiz, ample advice on career planning and options.

2.

ASSESSING YOUR SKILLS TO BETTER DEVELOP AND MOBILISE THEM: SELF-ASSESSMENT TOOLS

Most PhD candidates are aware of skills such as 'time management or 'knowledge communication and dissemination', but many more skills are developed as part of a PhD programme! Certain tools identify them by helping you see beyond the PhD's purely scientific work and take in the big picture.

Assessing your skills is of course essential to but not limited by finding a job! Being aware of all the skills acquired and developed during the PhD also allows you to adapt your programme, think more clearly about your direction and activities, and optimise your productivity.

In sum, assessment will allow you to:
- formulate your professional goals on the basis of acquired skills (position yourself for a post);
- judge whether you have the necessary skills to develop professionally;
- identify the skills you need to acquire in the context of your professional goals and train yourself accordingly;
- build your self-confidence by clearly visualising your acquired skills;
- adopt an appropriate language that will allow you to translate your experiences into skill descriptions;
- prepare for job interviews.

But remember:
These tools serve above all for assessment; they don't provide a magic solution but rather allow you to take stock and improve your self-knowledge in a professional context.

Discuss your skills with people who know you well: family, colleagues, and friends!

When to use a tool depends on the questions it poses. Some are intended to be used over a long period of time, while others are used more often. The answers can thus vary from one use to another and from one period to another.

Don't hesitate to use the same tool at various points in your programme; the results will change substantially!

YOU		OUR ADVICE
You wonder whether an academic career is right for you but don't really have time for a long questionnaire		Take 15 minutes to print out and complete **Laetitia Gérard's questionnaire** (what we call '*The Express*')!
You want to devote the necessary time to considering your entire PhD career in terms of skill development		Plan on completing the **ABG questionnaire** (*The Favourite*) a few times during your PhD
You're at the end of your PhD, don't want to devote too much time to your skills assessment but know it's important		Quick and efficient, the **University of Burgundy questionnaire** (*The mysterious one*), is your best ally
You want to devote time to thinking about your skills but don't want to print a long document		Register on the **DocPro plateform** (*The All-inclusive*) and draw up your skills profile online
You're proficient in English and are ready to pay for access to a comprehensive skills reference source to identify your skills as well as those you need to acquire for an academic career		**Vitae**, (*The Strategic one*), and its **RDF** will, for a fee, give you a clear view of your skills via access to many resources
You're proficient in English and seek career ideas based on your profile		**MyIDP** (*The Visionary*) is made for you and will match jobs to skills

THE EXPRESS:
LAETITIA GÉRARD'S SELF-ASSESSMENT TOOL

WHAT IS IT?

The form was developed by Dr. Laetitia Gérard, a higher education consultant and the author of *Le doctorat, un rite de passage*[1] The tool (**click here to download the tool**) was created in the wake of a project that supported PhD students at a French engineering *grande école* as part of their employment search. The form is inspired by a longer University of Strasbourg version intended for the public in the humanities and social sciences.

WHO'S IT FOR?

Students in the middle or at the end of their PhD who wish to work in the teaching and research professions.

HOW DOES IT WORK?

On a simple basis: by attributing points (0, 1, 2) to assess satisfaction based on statements. There are a total of 54 statements, divided into four skill categories: scientific, communication, pedagogical, and institutional knowledge. After completing each category, add up the points and insert them into the diagram at the end of the document to arrive at a sort of spider web that will help you see at a glance your strengths and weaknesses.

Beginning of the Phd **Middle of the PhD**   **End of the Phd**

ADVANTAGES	DISADVANTAGES
• Considers many aspects of research work • Can be completed several times during PhD • Easy and quick inventory • Uses a suitable and clear vocabulary • Provides a concise synthesis of responses	• Greatly focused on academic aspect • Assessing satisfaction is not assessing skill • Must be supervised, for example in a workshop or training, to result in useful consideration of skills • Relational skills (creation of a network, for example) are not addressed • Offers no leads or ideas after assessment completion

[1] Complete reference: Laetitia Gérard, *Le doctorat, un rite de passage. Analyse du parcours doctoral et post-doctoral,* Tétraèdre, Paris, 2014.

THE FAVOURITE:
ABG SELF-ASSESSMENT TOOL

WHAT IS IT?

The Bernard Gregory Association (ABG), which promotes the professional development of doctors in France, created this tool (**click here to download the tool**), which assesses skills and tracks their development. Inspired by the 'Skills record for graduate students' published by the Royal Society of Chemistry, the tool's aim is to objectify both acquired and targeted skills not only during the PhD but also with a view to continuing education. It is used at many universities in France.

WHO'S IT FOR?

PhD students (and not doctors), from all sectors, throughout their course.

Beginning of the PhD   Middle of the PhD   End of the PhD

HOW DOES IT WORK?

The tool is accompanied by a practical guide explaining in great detail how to complete the questionnaire. It's based on a three-part structure:

1. PhD candidates in relation to their environment: this part assesses knowledge more than skills. It begins with a series of statements which must be answered with 'yes', 'no' or 'irrelevant' and continues with questions whose answers can include examples, objectives, and ideas for improving.
2. Skills assessment: like the preceding part, this one begins with statements (this time to be rated from 1 to 4 or 'irrelevant'), then proceeds to setting goals and paths to improvement.
3. Formulating professional goals: on the basis of statements to be rated from 1 to 4, it assesses projection capacities from a professional perspective, then, in the same way, invites reflection.

The tool is scalable, that is, designed to be used at three key moments of the PhD. You must answer all of the questions pertaining to each PhD stage:
- Stage 1: within first six months
- Stage 2: mid-point
- Stage 3: six to nine months before PhD defence

ADVANTAGES	DISADVANTAGES
- Considers many aspects of research work (institution, research project, information, languages); situates you in a general way in your research work and is not centred only on skills assessment as such - Helps you think in-depth about skills - Easy to use thanks to very direct questions - Suitable for all sectors - Can assess development throughout PhD, thus over a long period	- Allows little nuance in responses - Time-consuming - Limited to a French reality (terminology) - Not useful in post-PhD context

THE MYSTERIOUS ONE: UNIVERSITY OF BURGUNDY SELF-ASSESSMENT TOOL

WHAT IS IT?

Developed by a University of Burgundy professor in 2009, the tool (**click here to download the tool**) is not accompanied by specific explanations, and we don't really know in what context it was developed … a mystery! Its use is left entirely to your discretion!

WHO'S IT FOR?

We recommend it for PhD students at the end of their programme to quickly determine acquired skills. At first glance, it's more relevant to science and technology PhD students.

*Beginning of the PhD   Middle of the PhD   **End of the PhD***

HOW DOES IT WORK?

It's quite short and very easy to use: just check the statements that apply to you.

The questionnaire revolves around seven skill families that can also be grouped into categories:

1. Research project management
   - Project design
   - Project execution
   - Project results exploitation and dissemination
2. Collaboration
   - Maintain a network
   - Laboratory/research centre integration and management
3. Teaching
4. Promoting to the general public

OUR ADVICE

This tool in itself is not enough! We strongly advise you to accompany it with in-depth reflection: force yourself to find examples for each statement and, if necessary, adapt certain questions to your reality! Your work doesn't involve digital simulations or algorithms? Think about what makes your discipline unique and translate it into a range of skills! Use the skills reference sources listed at the end of the brochure.

ADVANTAGES	DISADVANTAGES
• Easy and quick to use	• Does not offer specific vocabulary
• Takes stock of skills for CV writing or interview preparation	• Too binary and unnuanced
• Helps reveal unacknowledged skills	• Limited to a French reality (terminology)
• Focuses on essentials	• Unattractive (layout, presentation, etc…)
• Encourages discussion	• Not detailed enough

THE ALL-INCLUSIVE: DOCPRO SELF-ASSESSMENT

WHAT IS IT?

This **online** tool was developed by a partnership of the Association Bernard Gregory, the *Conférence des présidents d'université* and *Le Mouvement des Entreprises de France* (MEDEF). It was born of collaboration between members of the academic and business worlds in order to develop mutual understanding and trust, all in a shared language. The self-assessment is a reflection and communication tool for doctors.

WHO'S IT FOR?

It presents itself as being for doctors, but it's equally intended for PhD students, especially those at the end of their programme. It concerns all sectors.

HOW DOES IT WORK?

You must create an account (for free) to access the platform.

The platform lists 24 skills across three levels (phases) of skill acquisition, and in four categories: the core job (linked to research), personal and relational qualities, management, and strategy/leadership.

Each category is broken down into several skills that you can add to your profile. These are accompanied by an explanation of what, theoretically, is expected of you regarding their mastery: you must choose where you are in the development of each skill. You can also explain how you developed it.

Once completed, a profile overview is available and can be downloaded.

Beginning of the PhD **Middle of the PhD   End of the PhD**

ADVANTAGES	DISADVANTAGES
• Easy to use, quite intuitive • Establishes your complete and evolving profile • Provides job interview preparation • Encourages reflection on skills through requested examples • Available in English	• Certain functionalities less relevant to job search in Belgium: platform posts job vacancies based on registered profiles, mainly in France • Too binary: a skill is either added to profile or not • Busy and not very user-friendly interface • Site not updated regularly • Division into 'phases' leaves little room for nuance in terms of skill development

THE STRATEGIC ONE: VITAE RESEARCHER DEVELOPMENT FRAMEWORK © self-assessment tool

WHAT IS IT?

The Researcher Development Framework© (**available online**) was created by the English association Vitae, which promotes researchers' professional potential.

Created in 2010, this is a scientific career planning tool from a strategic perspective. It's a detailed skills reference guide accompanied by a skills self-assessment questionnaire. Developed by and for researchers, it offers a full description of useful skills in the context of a career in the research professions.

WHO'S IT FOR?

Mainly PhD candidates at the end of their programmes and for doctors in all sectors.

HOW DOES IT WORK?

It's not free. You have to pay for a licence (personally or through your institution). Individual subscription costs £24 (approx. €27). The site offers a series of useful links and documents in addition to the skills reference guide.

In the questionnaire, for each of the four areas ('knowledge and intellectual abilities', 'personal effectiveness', 'research governance and organisation', 'engagement, influence and impact'), around 20 skills are identified; development phases allow you to set objectives and identify the means to acquire each skill. If this tool interests you, start by watching the video presentation (freely available on the home page)!

Beginning of the PhD   *Middle of the PhD*   **End of the PhD**

Our advice : Check if your institution already has a subscription, or whether your funding source will reimburse you the £24.

INTERESTING! Some content is free: the Vitae site is full of interesting information and documents, for example a series of 'booklets' on research careers, according to aspirations and profile ('balanced', 'creative', 'engaging', 'leading', 'informed' and 'career-wise'). The skills wheel is also available for free download.

ADVANTAGES	DISADVANTAGES
• Easy to use, intuitive and interactive • Extensive list of skills • For all sectors • Proposes a strategic career vision • Overview of past and future actions	• Not free of charge (check if institution has subscription) • Time-consuming • Doesn't necessarily help prepare for interviews

THE VISIONARY:
MYIDP SELF-ASSESSMENT TOOL

WHAT IS IT?

MyIDP (Individual Development Plan) is an **online** tool created by the Federation of American Societies for Experimental Biology, which was taken up and amended by a consortium of American research centres. Thus it was created in an academic environment.

In reality, 'Individual Development Plan' is a generic name which refers to many tools in the US job search market. It can be broken down by sector or profession. The one we offer here relates specifically to the academic environment.

WHO'S IT FOR?

Created for science postdocs, it has gradually been extended to the entire PhD. While questions focus on scientific research, the tool can also be used by PhD candidates at the end of their studies, young doctors, and doctors in the process of changing careers.

HOW DOES IT WORK?

You must first create an account, which is free and quickly done. The plan begins with an individual skills self-assessment.

The self-assessment is divided into three parts:
1. assessment of skills by category on a scale of 1 to 5;
2. interests assessment to identify the ideal professional situation, by assessing, on a scale of 1 to 5, what you would and would not like to do in your career;
3. assessing your values on a scale of 1 to 5.

A summary is available at the end of each part. Based on responses, the tool offers a range of career choices. If it seems a career choice doesn't suit you, just click on the displayed percentage to better understand it.

The tool also offers various resources and reading materials, as well as a SMART[2] plan for the skills you would like to improve.

Beginning of the PhD   *Middle of the PhD*   ***End of the PhD + After PhD***

ADVANTAGES	DISADVANTAGES
● Easy online access after registration ● Considers skills and career development in-depth, over medium or long term ● Easy to use and intuitive ● Comprehensive, addresses several aspects ● Analyses assessment results to generate career path matches	● Focused on science and technology sector (terminology: experiments, human and animal research, etc.) ● Time-consuming ● Limited to an American reality ● Interface not user-friendly ● By trying to cover a lot of points, it doesn't get to the point: risks losing your attention

[2] SMART indicators assess whether a plan is specific, measurable, achievable, relevant and time-bound.

HAVE YOU CARRIED OUT YOUR SKILLS ASSESSMENT USING ONE (OR MORE) OF THESE TOOLS? WELL DONE! NOW WHAT?

- Establish a development plan with your thesis supervisor that meets your needs for skills acquisition and/or reinforcement.
- Identify courses in **your university**'s course catalogue that meet your needs.
- Organise meetings with PhD candidates in your institute, research centre or even accommodation to discuss your assessment results and prospects.
- Discuss your assessment results with a career **counsellor** to learn about possibilities.
- Consult a **skills reference source*** to acquire the vocabulary for the skills your assessment identified.
- Save your results! You have to be able to go back to your online or paper assessment to acquire vocabulary, measure your progress, and establish your course plan.

WHO TO CONTACT:

- UCLouvain : doctorat-adre@uclouvain.be
- ULB : doctorat@ulb.be
- ULiège : doctorat@uliege.be
- UMons : phd@umons.ac.be
- UNamur : euraxess@unamur.be (or click here) or emploi@unamur.be (or click here)
- USL-B : doctorat@usaintlouis.be
- Objectif Recherche : contact@focus-research.be

*WHAT IS A SKILLS REFERENCE GUIDE?

It is a structured list of skills and their definitions that helps you learn vocabulary and recognise the skills you have and the skills you need. In short, they are guides that provide you with precious information when defining your career plan! Many such sources, often based on profession, exist.
For the PhD, consult the source proposed in the '**Career**' report or the Vitae skills wheel.

3.

USEFUL RESOURCES

- Bernard Fusulier, 'Faire une carrière scientifique aujourd'hui. Quelques clés de lectures et critiques', in Edwin Zaccai, Benoît Timmermans, Marek Hudon, Barbara Clerbaux, Bruno Leclercq and Hugues Bersini (eds), *L'évaluation de la recherche en question(s)*, Bruxelles, 2016, pp. 101–110 (online).

- Lut Mergaert and Peter Raeymaekers, *Researchers at Belgian Universities. What Drives Them? Which Obstacles Do They Encounter?*, King Baudouin Foundation, 2017 (online).

- Neda Bebiroglu, Baptiste Dethier and Christel Ameryckx, *Situation Professionnelle des Titulaires de Doctorat de la Fédération Wallonie-Bruxelles*, ORCS Série de Rapports Thématiques #1, Observatoire de la Recherche et des Carrières Scientifiques, Bruxelles, Belgique, 2019 (online).

- Barthélémy Durette, Marina Fournier and Matthieu Lafon, Compétences et employabilité des docteurs; rapport d'enquête CAREER, Adoc Talent Management Paris, 2012 (online).

- Sébastien Poulain, Bilan de Compétence: valorisation professionnelle du doctorat, Étude réalisée pour le compte du Bureau d'aide à l'insertion professionnelle de l'Université Paris I Panthéon-Sorbonne au sein de l'école doctorale de science politique (UFR 11) de l'Université Paris I Panthéon-Sorbonne, 2011 (online).

- Ruth Neumann and Kim Khim Tan, 'From PhD to Initial Employment: The Doctorate in a Knowledge Economy', in Stud. High. Educ. 2011, 36 (5), pp. 601–614.