

研究者のための + α シリーズ Vol.1

What is Researcher Development?

—英国 Vitae がすすめる研究者職能開発の取り組みとは—

Thank you for many insightful questions and comments. The lecturers' responses to them are listed as follows. For further questions and comments, please contact Dr. Janet Metcalfe via e-mail (janet.metcalfe@vitae.ac.uk).

“Section3 The Researcher Development Programme”において、RDF のプロフィールはイギリスで広まっているということですが、これは自分で自分のプロフィールを作成するようなものでしょうか？それとも教育機関などが研究者を評価し、作成するのでしょうか？【助教相当の方より】

- The RDF is primarily designed as a self-reflection activity to encourage researchers to think about their skills and abilities against different levels of competence. The researchers are encouraged to provide evidence of their assessment and to check this with others, for example their colleagues or their supervisor. Universities can embed this assessment within formal institutional processes, for example annual reviews of progress in the doctoral degree. Vitae has resources that illustrate the type of evidence that will demonstrate competency for each of the individual descriptors within the RDF and how to improve in this area. Vitae has a ‘Getting Started’ lens on the RDF that is designed to be used by researchers and supervisors when they start on a doctoral degree.

<https://www.vitae.ac.uk/vitae-publications/rdf-related/getting-started-in-research-lens-on-the-vitae-researcher-development-framework-2013.pdf>

RDF の日本国内における利用例をご紹介します。【准教授・常勤専任講師相当の方より】

- Hiroshima University is using the RDF in its HIRAKU programme. University of Tsukuba provided the initial translation of the RDF into Japanese. Vitae has provided training at Kyoto University using the RDF and we are aware of the RDF being used by Nagoya and Waseda universities. Osaka University has used the RDF to explore the recruitment of international faculty. I'm sure it is also used at other universities in Japan.

RDF を導入した大学とそうでない大学で、研究パフォーマンスに顕著な向上がみられた事例を教えてください。論文数、特許数、共同研究数、外部資金獲得数など分かりやすい指標で説明していただけると助かります。【法人職員の方より】

- We have data that shows that doctoral researchers who invest in their professional development are more likely to complete their doctoral degree on time (3 or 4 years in the UK), than researchers who don't. We also have small evaluation studies that show it improves their employability and success in applying for fellowships. It is harder to evidence performance at an institutional level as most UK universities have voluntary researcher development programmes so researchers can choose whether to participate in professional development.

英国の産業界は RDF をどのように評価しているのでしょうか。博士課程終了後の就職先として一つの候補である民間企業と、大学の博士課程教育の関連がどのようになっているのか知りたいです。【法人職員の方より】

- When the RDF was developed Vitae involved companies from different employment sectors, for example, R&D based industries, public sector organisations, finance companies. They were asked to identify the aspects of the RDF that they most valued in their employees. From this we created the Employability Lens on the RDF.

<https://www.vitae.ac.uk/vitae-publications/rdf-related/employability-lens-vitae-researcher-development-framework-rdf-may-2012.pdf>

(1)Vitae の提携メンバーの大学・機関のなかで、人文社会系を中心とする大学・研究機関はありますか？また小中規模大学での提携機関はありますか？(2)個人会員と組織会員では、Vitae から提供されるプログラムは違いますか？【URAの方より】

- (1) In the UK there are only a few institutions that specialise only on the humanities and social studies. Most of these are members of Vitae. Examples include the London Schools of Economics and Political Science (LSE), the School of Oriental and African Studies (SOAS), The Royal College of Art, Glasgow School of Art, Goldsmiths University of London, University of the Creative Arts. Our members are a wide range of sizes from very small universities with less than ten doctoral researchers to large universities with more than 3000 doctoral researchers. The British Academy and Guild HE (both focusing of arts, humanities and practice-based research) are also

Affiliate Members of Vitae.

(2) Our membership programme is at an organisational level, so all individuals (staff and students) of an organisation become members and can access our information and resources. There is more information here (<https://www.vitae.ac.uk/about-vitae-membership>) and we are always happy to have a meeting to answer your questions.

“Section 4 University Example”でご紹介の通り、大学が積極的に Vitae を導入されていることは素晴らしいと思います。この導入は大学のどのような組織あるいは国の組織により実行されるのでしょうか？このようなプログラムが導入されないと学生も研究者もキャリアが積めず給与も稼げない状況が地域によって見受けられます。地域格差問題への御意見を頂ければ幸いです。【准教授・常勤専任講師相当の方より】

- When researcher development started in the UK it was introduced by individual universities who could see the advantage it would have for their researchers. It is now recognised as important by the government and research funders so we have policies and requirements across the UK, although there are some minor differences between Scotland and England, for example. It is helpful to have these central/regional policies — hopefully with associated funding as the introduction of researcher development programmes does require some investment.

RDF はユニバーサル（どの国でも適用可能）な内容でしょうか。リサーチャーがターゲットとするのはグローバル市場だと思いますが、RDF を使用する際に、使用側はだれであっても参考になり、役立つのでしょうか。【准教授・常勤専任講師相当の方より】

- When Vitae originally developed the RDF we did it as a UK project, but at least 25% of the researchers we interviewed were international researchers. Following publication of the RDF there was immediate interest from other European countries. In 2012 The European Science Foundation commissioned a pilot of the RDF in six European countries to test its applicability across Europe. Researchers could see the value of the RDF irrespective of their level of experience, discipline or research/country context. Since then the RDF has been used across the world and has been translated into Japanese and Arabic.

日本では、大学院の指導教官や周囲の研究者に、博士を取得するといわゆる専門に特化したアカデミックなポスト（大学教員、研究所の研究員）に就くこと以外に道はないように教えられます。専門の研究をして論文を書くこと以外は、（研究者としての）能力として認められない傾向があります。企業も博士を雇用する例が少なく、アカデミック以外での雇用が非常に限られています。この状況を変えるためには、どのようなアクションをしていけば良いのでしょうか？日本の多くの大学や研究機関などで RDF を取り入れて貰えると良いのかも知れませんが、まずそこに高いハードルがあるように思います。【准教授・常勤専任講師相当の方より】

- In the UK we have the same challenge of helping companies recognise the skills and abilities that researchers can bring to their organisation, particularly for occupations that are not directly involved with research and development. This takes a long time to change as researchers and universities have to change the way they talk about the abilities of researchers and there are a lot of companies that we need to engage with. The RDF is an important framework to help make these changes and we can see the difference this is making in the UK. Immediately after graduation half of doctoral graduates go on to work outside of academia, some in R&D occupation, but also in management jobs, finance and public administration. It is helpful to have national action to drive these changes, but small local actions can also make a big difference. For example using the RDF in a workshop with researchers or supervisors to increase understanding of what companies are looking for, or running a careers fair and asking companies to meet researchers, inviting alumni who are working in companies to come and talk to researchers all could be ways to start things locally.

RDF プロフィールは大学、一般企業への就職でどれくらい重要視されるのでしょうか？また応募者はほぼ全員が RDF プロフィールを保有しているのでしょうか？【助教相当の方より】

- It is the outcome from engaging in the RDF that is most important. Researchers who have used the RDF will be more likely to understand the range of skills and abilities that they have developed as a researcher and be more able to describe these to potential employers. UK employers are likely to use competency-based interviewing to assess whether someone is a good applicant for a job and not rely too much on certificates or ‘profiles’. Universities are also looking for academics who bring more than their research and teaching abilities, such as leadership abilities, innovation capabilities, outreach to the public so researchers need to be able to

evidence these capabilities.

RDF の Phase1 の Skillの中には学部生のカリキュラムの組み込むことで、将来アカデミックキャリアを選択するにあたっての準備、またアカデミックキャリアを選ばない学生にとっても企業への就職する際に役立つかと思います。RDF の教材は学部生にも適用可能でしょうか。もっとも低い年次での適用事例がわかれば教えてください。【法人職員の方より】

- The RDF is specifically focused on developing as a researcher, so this is applicable for anyone undertaking a research project at undergraduate level or master's level. I agree that the principle of the RDF as a self-reflection tool is applicable at undergraduate level- or at any stage of someone's education or career.

Vitae Researcher Development Framework (RDF) (<https://www.vitae.ac.uk/vitae-publications/rdf-related/researcher-development-framework-rdf-vitae.pdf/view>) の日本語訳されたものは公開されていますか？「vitae マップ」に関しては日本語版があるようですが、入学直後の大学院生に紹介する際に、各項目の詳細な内容に関しても日本語版があるとわかりやすいかと思いました。【教授相当の方より】

- We haven't published the full version of the RDF in Japanese, but if you would like to contact us, we can arrange for you to access this.

既に大学独自の研究者育成プログラムが存在する場合、RDF を効果的に導入するために、どのように予算・体制・研修を充実していくと良いかといった、研究機関の現状に応じたコンサルタント的な支援はどの程度受けられるのでしょうか。【法人職員の方より】

- Vitae can support a university by reviewing their existing researcher development provision, help it to develop an ongoing strategy, providing training for staff to deliver training, delivering training activities for researchers.

RDF は博士のキャリア開発のために用意されているものですが、内容を聞いていると、企業に勤める研究者のキャリア開発にも使えそうに思えますが、この点についてご意見を伺いたいです。【企業研究者の方より】

- The RDF can be used for both careers in academia and careers in other employment sectors. In both cases, it is about providing researchers with the way to understand the skills they have developed as a researcher, how to develop them further depending on their career ambitions and how to describe their abilities to potential employers.

RDF の導入について、単一の大学、特に規模の小さい大学ではハードルが高いように感じます。地域の拠点となるような大学がハブとなるような運用について、海外での実践例はありますか？また、日本での実現のためにすでにアクションがとられていれば教えていただきたいです。【助教相当の方より】

- The RDF can be introduced into a university at different levels. This may be as a strategic framework that is built into the university's training requirements for researchers with any training courses mapped against the RDF so researchers know how to develop their skills further. It can be introduced into training courses as a tool to help researchers develop their skills. It can be used by individual researchers, and also with their supervisors to understand their competency level and agree an action plan to develop them further. The RDF is most effective when all these aspects are incorporated into the university. The RDF cards is a very effective way to introduce the RDF to researchers. <https://www.vitae.ac.uk/vitae-publications/rdf-related/rdf-development-cards>

現在、私は医療機器の研究開発を進めており、研究に必要な勉強のため、6年間の留学を考えています。30代半ばで、長期間留学する判断は妥当といえるでしょうか？ご意見を伺いたいです。【企業研究者の方より】

- We do not give individual careers advice, but perhaps there are career coaching services in Japan that you can ask for advice. The university where you are going to study medical science may also be able to give you some advice on your career prospects with a medical degree.

Vitae のノウハウや、RDF を導入している欧州の大学のリストがあれば教えてください。【企業研究者の方より】

- The RDF is freely available for universities and research institutes to use so we do not keep a list of every university that is using it. However, we have provided training using the RDF for a range of universities through the Horizon 2020 ITN programme (doctoral training) and directly to universities. These include the PLATO ITN (University of Oslo and 8 partners), ExSIDE ITN (Università Cattolica del Sacro Cuore, Milano and 7 partners), Luxembourg University, Helsinki University.

RDFにおける phase の進行段階はどのように評価されるのでしょうか。Vitae により客観的に評価していただけるのでしょうか。【研究員・ポスドク相当の方より】

- The RDF is designed to be used as a self-reflection activity and not as an evaluation process. We believe it is important for researchers to honestly reflect on their abilities and this may not be the case if they will be ‘scored’ on the results. However, we have conducted a pilot recognition project in the UK where researchers produced a self-reflective portfolio of evidence of their competencies that was independently reviewed.

It seems our university doesn’t have the service of RDF. If we want to use it as self-diagnosis, how can we do? Register to Vitae, and answer the questions through RDF planner? 【准教授・常勤専任講師相当の方より】

- A researcher can register for an individual subscription for the RDF Planner through the Vitae website. <http://rdfplanner.vitae.ac.uk/>

Does Vitae conceptually relate with OECD, PISA surveys and others? 【企業関係者の方より】

- Vitae has worked with the OCED on the CDH survey (Careers of doctoral holders). We were part of the working group that developed the competency module for this survey, which is based on the RDF. PISA (Programme for International Student Assessment) of the European Commission is targeted at 15 year olds, so we have not had any engagement with this survey.

研究者個人のセルフアセスメントということですが、評価はどのように行うのでしょうか？RDFをつかった researcher development の評価の在り方も、研究者自身からの視点、大学からの視点、国からの視点で異なるように思います。あくまで、研究者個人が、セルフアセスメントすることなののでしょうか？【教授相当の方より】

- The most important aspect of the RDF is not to use it for evaluation, but for individual researchers to be able to take ownership of their development. As a self-assessment, it may not be an entirely accurate report, but this is a process that can be refined by getting feedback from supervisors, managers and peers. That in itself is a useful learning experience.

In Japan, there is no particular group responsible for young researcher development within universities. How did UK start it? 【企業関係者の方より】

- The growth of researcher development in the UK has taken many years and to achieve that kind of national-level change needs the involvement of government, research funders and institutions. In Session 1, Janet described some of these national level steps. However, there were also a lot of local initiatives happening at the same time, i.e., within individual research groups or institutions, or through collaborations with colleagues or nearby institutions. Bottom up initiatives are just as important as top down policy in starting new ways of doing things. Vitae's work was very dependent on working with individuals and institutions who believed in the importance of researcher development and championed this. This collective bottom-up action led to national policymakers being more engaged.

Do other European countries use your RDF or they developed their own framework? 【教授相当の方より】

- As far as we know, other European countries have not developed their own frameworks.

RDF にもとづく様々な能力開発機会と、大学院正規過程における教育とはどのように連携しているのでしょうか。【助教相当の方より】

- In the UK all universities are independent bodies and will have their own processes for monitoring progress in doctoral degrees. The expectation is that every researcher will have a career development plan: a review of this may be a formal part of the annual review processes by the Graduate School. Many universities map their training courses provided by the Graduate School or researcher development department against the RDF. Some universities will record attendance as part of their reporting processes. Some universities have compulsory elements of training within their requirements for a doctoral degree.

(1) Researcher Development Officers を務める方々は、どのような qualification の方々でしょうか？この方々ご自身も、博士号をお持ちであったり、大学教員でしょうか？(2) Dr Metcalfe の最後のスライドの、More intellectually 'mobile'は、具体的にどのようなことでしょうか。【助教相当の方より】

- (1) People who are employed as researcher developers can have a variety of backgrounds and they can have a range of responsibilities within their job. It is fairly common for these people to have a PhD or postdoctoral experience and have moved from a research position. University faculty can also spend part of their time providing professional development for researchers. Researcher developers may have formal training qualifications or have developed their training ability through experience, i.e. learning alongside other trainers. Vitae provides professional development training for researcher developers and offers a 'trainer the trainee' programme for universities.
- (2) In my last slide in Session 5 I highlight how quickly the academic environment is changing and how it is likely to change much more quickly in their future in ways we do not yet know. The impact of COVID-19 is a good example of unexpected change. Similarly, economies are changing and the world is facing some grand challenges, and what is described as 'wicked problems'. Our researchers need to be able to react, adapt and solve these unknown and difficult challenges. Being intellectually mobile is about being able to look beyond the obvious or usual, to develop new ideas and ways of thinking, to create connections and prepared to work in new areas.

RDF のコンピテンシーは、国や文化によって、変わるものでしょうか？ユニバーサルなものでしょうか？【教授相当の方より】

- The RDF was developed in the UK but has been validated across Europe and is increasingly being adopted internationally. This does suggest the competencies identified in the RDF are internationally applicable. However we are currently undertaking a project to look at how the RDF may need to be refreshed in the future to include things that have become international priorities such as new digital technologies, research integrity and research culture.

研究者個人が PDF を受講し、海外の大学や研究機関と研究活動ができるような国際的な展開について、どうお考えでしょうか？【准教授・常勤専任講師相当の方より】

- Vitae collaborates with the European EURAXESS initiative that facilitates the international mobility of researchers. Together we developed the Researcher

Mobility Lens on the RDF and demonstrated the competencies useful for and gained through moving internationally as a researcher.

<https://www.vitae.ac.uk/vitae-publications/rdf-related/researcher-mobility-lens-on-the-vitae-researcher-development-framework-2013.pdf>

私は研究者等求人サイトの運営に携わっています。RDF の Job Application は企業就職への能力開発に役立つと思うので、当サイトの会員の能力開発や就職支援に、博士人材専門の民間エージェントと RDF を活用できればと考えますが、ご意見をお聞かせください。【法人職員の方より】

- The RDF does help the employability of researchers. I will be happy to talk with you further about how the RDF could contribute to your service.

In case of researchers, if my understanding is right, it is self-evaluation based on RDF to identify competencies in various domains. How can employers validate it while hiring? 【助教相当の方より】

- In applying for jobs, the RDF self-evaluation is used by researchers to improve their CVs and application forms for jobs. It also helps them prepare for interviews by knowing their strengths and being able to give examples of the evidence of these strengths. It helps them talk in a language that employers understand.

英国では研究テーマ設定を学生が設定出来るのでしょうか？日本では博士課程の研究テーマを指導教官から提示されていることが基本と思います。そのため、RDF を導入しても求めるスキルを身につけられるか疑問です。【企業研究者の方より】

- Whether doctoral researchers set their own research theme varies by disciplines. In large research groups they may be offered a selection of topics that have been identified by the group leader. In the humanities and social sciences there will be more individual freedom. However, irrespective of discipline, the process of doing research develops many of the competencies described in the RDF. Part of the purpose of the RDF to encourage researchers to realise that they are developing these skills through researching and to encourage them proactively to develop them further so they can be better researchers.