SYMPLECTIC Elements

Part of DIGITAL science

Using Symplectic Elements as a research information management (RIM) system to support the Research Excellence Framework

Reflections on the REF 2021

Contents

Executive Summary

The Research Excellence Framework (REF) is a UK-wide assessment of the quality of research in universities, undertaken on behalf of the UK Government by the four higher education funding bodies (Research England, the Scottish Funding Council, the Higher Education Funding Council for Wales, and the Department for the Economy, Northern Ireland).

This paper explores the role of Symplectic Elements as a Research Information Management System (also known as a Current Research Information System, or CRIS) in supporting the REF submissions process. It provides an overview of the bespoke modules and functionalities within Symplectic Elements which have been designed to empower HEIs in gathering and collating information for the REF, as well as providing case studies and testimonials from some of the institutions using the platform.

> We know how important the REF is to our UK institutions, so we created a dedicated team to focus time and resources throughout the 18 months leading up to REF 2021."

Manya Buchan
Senior Product Manager,
Symplectic

Background

Research assessment exercises are increasingly important to higher education institutions seeking to measure the effectiveness and impact of their research outputs and activities.

In many countries, where allocation of public funding means that institutional spending must be both accountable and socially impactful, assessment exercises (including levels of open access compliance) are centrally mandated by the government. In others, benchmarking and showcasing of research output is essential to securing funding within a competitive space. Globally, this process of evaluation, assessment and benchmarking is a critical part of understanding how to better meet the strategic goals of the research institution.

The Research Excellence Framework (REF) is a process of expert review designed to assess the quality of research in UK higher education institutions, and contemporaneous to ERA (Excellence Research for Australia) in Australia or the PBRF (Performance Based Research Fund) in New Zealand. Its policy aim is 'to secure the continuation of a world-class, dynamic and responsive research base across the full academic spectrum', to be achieved through its stated threefold purpose:

- To provide accountability for public investment in research and produce evidence of the benefits of this investment.
- To provide benchmarking information and establish reputational yardsticks, for use within the HE sector and for public information.
- To inform the selective allocation of funding for research.[1]

For Higher Education Institutions (HEIs), the REF is not only a part of securing funding and demonstrating societal impact, but also a key contributor to an institution's reputational ability to attract a high calibre of talent and knowledge across faculty, students and researchers (thereby creating a 'virtuous circle' wherein high quality researchers lead to high quality research and vice-versa).

The REF was first carried out in 2014, replacing the previous Research Assessment Exercise, with processes once again revised considerably ahead of the REF2021 following the recommendations of the 2016 independent review of the REF led by Lord Stern. As part of his review, Stern noted that "Research information systems (RIS) play an increasingly important role for the governance of research at the institutional, funding body and national levels".

WHAT IS THE REF?

The REF is a process of expert review, carried out by expert panels for each of the 34 subject-based units of assessment (UOAs), under the guidance of four main panels. Expert panels are made up of senior academics, international members, and research users.

For each submission, three distinct elements are assessed: the quality of outputs (e.g. publications, performances, and exhibitions), their impact beyond academia, and the environment that supports research.[4]

The date of publication for the results of REF 2021 is currently expected to be 12 May 2022.

1 https://www.ref.ac.uk/about/what-is-the-ref
2 https://www.ref.ac.uk/publications/guidance-on-revisions-to-ref-2021
3 https://www.gov.uk/government/publications/research-excellence-framework-review
4 https://www.ref.ac.uk/about/what-is-the-ref

Challenge

The changing nature of the exercise, along with its complexity and time-consuming nature, has led to considerable administrative burden upon both administrators and researchers.

According to a 2021 survey paper from RAND Europe on perceptions of the Research Excellence Framework among UK researchers, "The most frequently mentioned reason for the negative attitudes to the REF is the excessive burden it created in terms of time, resources, and workflow required to complete the REF exercise for both academics and administrators."[5]

With the goal of to lessening this burden, Symplectic worked with the community to develop specialist functionality within Symplectic Elements designed to help institutions gather, create and prepare outputs and impact statements ready for streamlined export and submission as part of the REF process.

We worked closely with a REF steering committee made up of 11 UK-based higher educational institutions, representing a variety of sizes and disciplines, in order to identify and explore their needs. Steering committee participants were University of Exeter, Anglia Ruskin University, Loughborough University, University of Liverpool, University of Oxford, University of Sheffield, London South Bank University, University of Cambridge, Imperial College London, Liverpool John Moores University, and University London, and included stakeholders across IT, business departments, the library and the research office.

Symplectic staff worked with members of the committee in a highly consultative, collaborative manner to define scope and priorities, benefiting from the deep domain experience of our clients in the research community and providing a forum for open discussion and knowledge sharing.

"There is no single way for a vendor to prescribe functionality to the research community, so it's far better to be consultative and work together in partnership," said Jonathan Breeze, CEO at Symplectic, "Over time, working through REF2014 and then REF2021, we developed the trust from clients that we could work with them effectively to solve the challenges set by the Research Council."

Some of the (much smaller!) Symplectic Team in 2013

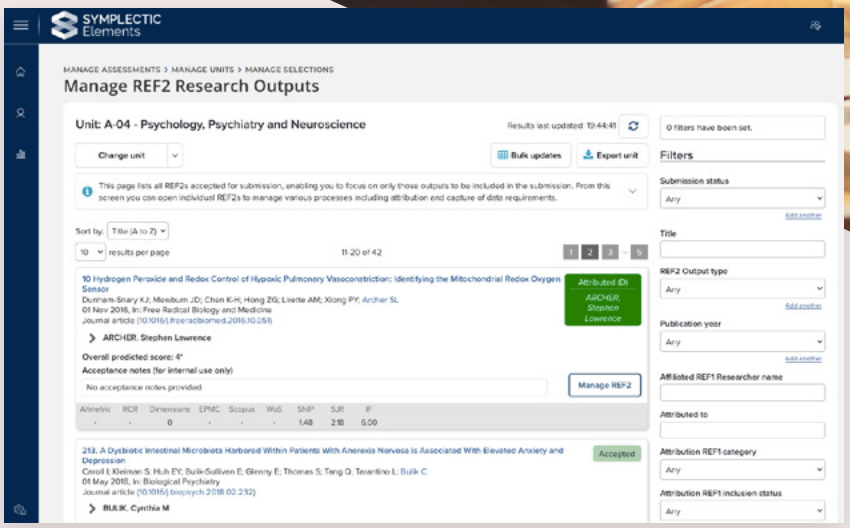
ABOUT SYMPLECTIC

Symplectic is part of Digital Science, a technology company which works towards making research smarter, more collaborative, and more efficient. We are trusted by universities, research institutes and funding organisations around the world.

We work in pursuit of the advancement of knowledge, delivering flexible knowledge management solutions that help universities, institutions and funding organisations achieve their research goals. Our flagship products include Symplectic Elements, a research information management system that captures, analyses and showcases scholarly activities, and Symplectic Grant Tracker, a leading tool that streamlines grants management.

www.symplectic.co.uk

5 https://repository.jisc.ac.uk/8542/1/understanding-perceptions-of-the-research-excellence-framework-among-uk-researchers.pdf



The filterable Manage REF2 screen lists all Accepted Research Outputs, highlighting key properties such as status, overall score, internal co-authors.

The result is a powerful workflow management tool built on top of the Assessment Module in Symplectic Elements, which acts as a full submission preparation and management tool for all research outputs and staff information required as part of the REF exercise.

Following the publication of new guidelines ahead of REF2021, the steering committee and wider Symplectic community once again convened to set priorities, including a major rethink on how best to capture metadata to fit the new process. The Symplectic team worked in an iterative manner that would allow institutions to begin collecting and curating assessment information as early as possible while awaiting the release of updated data structures from Research England.

New functionality was released every 6 weeks, following an agile methodology. For each release, Symplectic's Senior Product Manager and REF project lead Manya Buchan held a client seminar in order to describe new implementations, field questions and take feedback, ensuring that user adoption and community engagement remained high through the process.

"We know how important the REF is to our UK institutions, so we created a dedicated team to focus time and resources throughout the 18 months leading up to REF2021," said Manya. "Workflows and functionality were designed to align both with internal institutional processes, and with the complexity inherent in the REF submission process."

Solution

Symplectic Elements is a highly configurable research information management (RIM) system designed to help academic institutions and organisations capture, store, showcase, track, manage and report on research activities and outputs from end-to-end.

Its highly configurable data model makes it easy to collect specialised metadata on both traditional and non-traditional research outputs. Elements integrates with a wide range of external data sources to reduce the burden of data discovery, collection, and collation, and can automatically harvest a range of metrics from Dimensions, Web of Science, Scopus, Europe PMC and Altmetric to help inform internal quality judgements.

The REF functionality within Elements offers specialist support to capture REF-related metadata about REF1 research staff and REF2 research outputs. It easily supports multiple preparatory exercises, enabling both researchers and reviewers to engage directly with the selection and review of outputs in-system - even before the submission requirements for the next REF are substantially known.

Elements offers functionality to support the complete REF2 cycle, from selection through to review, acceptance, and attribution. Out-of-the-box stock REF reports enable institutions to report on all REF content and fields for each item, including validation status, and stock REF screens and dashboards enable managers to get a clear submission overview.

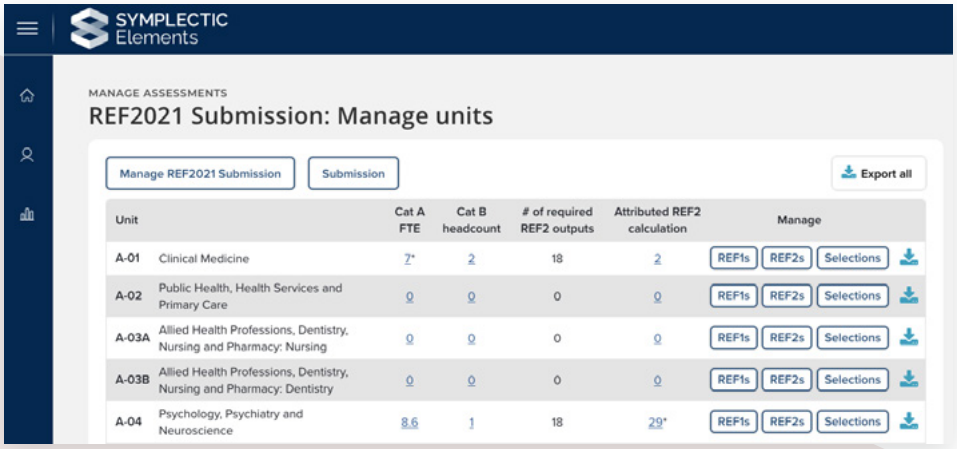
A comprehensive set of import options is available to edit content in bulk. Submission functionality is configurable to enable managers to tailor interaction with the REF submission system to align with institutional processes.

Elements offers functionality to support the complete REF2 cycle, from selection through to review, acceptance, and attribution.

The same flexible assessment tool allows for a wide range of review workflows in addition to REF; this has extra benefits to institutional clients, who can continue to carry out annual assessment exercises on a quarterly, annual, or ad-hoc basis. This can vastly speed up and streamline the REF exercise later once the next set of rules has been released, as many of the REF1 (staff census), REF2 (research outputs) and REF3 (impact case studies) data can be collated and curated on an ongoing basis.

Symplectic Elements' specialist REF functionality is supported through several key modules within Elements:

- Assessment Module
- Repository Integration & Open Access Reporting
- Impact Module



Manage Units screen, listing all UoAs and summary REF1 and REF2 values.

Assessment Module

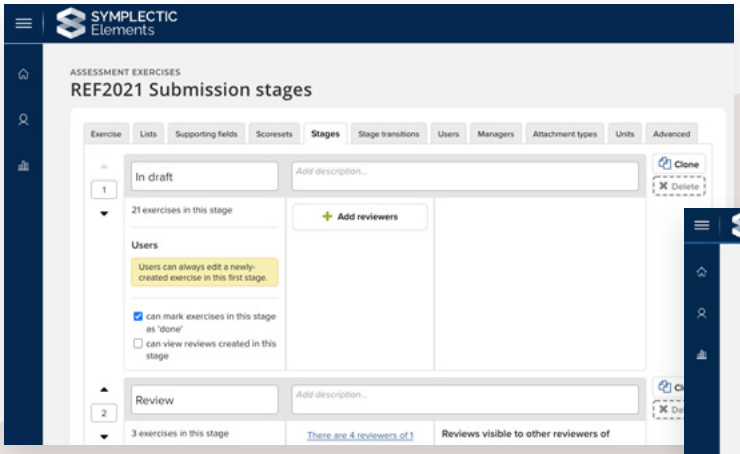
Our flexible Assessment Module enables institutions to create bespoke assessment exercises for a wide range of purposes, including internal reviews and preparatory exercises as well as formal submissions for government exercises such as the REF.

The assessment workflow is completely configurable, allowing administrators to choose how the exercise should be designed. For each exercise, administrators can design stages where:

- Researchers can select specific outputs or activities (e.g. publications, grants, impact and professional or teaching activities), and provide supporting information.
- Reviewers can assess the submissions providing scores and comments.
- Exercise managers can review and optimise the data collected before submission.

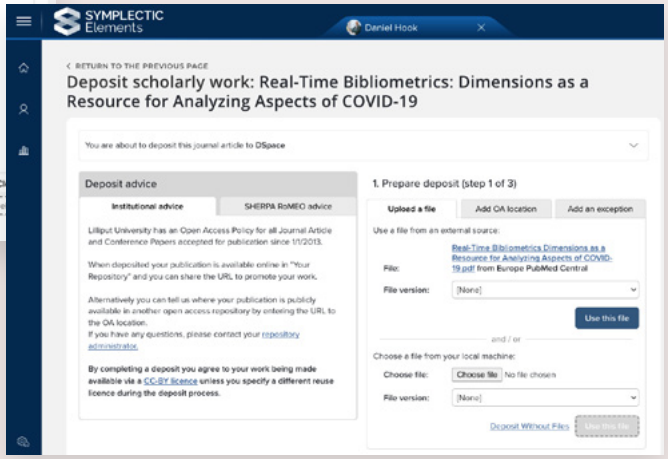
The flexibility of this module means institutions can choose whether they want a simple one-step submission or a more complex assessment with multiple rounds of review.

The Assessment Module offers specific functionality for national assessments including both the Research Excellence Framework (REF) in the UK and the Performance-based Research Fund (PBRF) in New Zealand. Our REF functionality enables institutions to manage their REF submissions at the Unit of Assessment level. We offer specialist support to capture REF-related metadata about research staff and research outputs, and throughout the research output submission process including selection, review, acceptance, and attribution.



Each assessment exercise workflow is configurable.

Elements' open access functionality supports researchers and institutions in meeting external open access policies and institutional targets.



Repository Integration & Open Access Reporting

A policy requirement on open access was introduced as part of the REF2021, reflecting the view of the four UK HE funding bodies that 'the outputs of publicly funded research should be freely accessible and widely available'.[6] Inclusion of open access policy within the REF is part of a wider drive toward making research openly available, epitomised by the parallel roll-out of 'Plan S' in 2021 and necessitating that researchers benefitting from state-funding be required to publish their work in open repositories.

Symplectic Elements incorporates a powerful bi-directional repository integration which makes it easy for researchers (or administrators acting on their behalf) to deposit required full text into institutional repositories, and ensures that direct links to those files are captured within Elements ready for inclusion in submission. The Elements Open Access Monitor also offers a range of REF-related report templates.

6 https://www.ref.ac.uk/media/1228/open_access_summary__v1_0.pdf

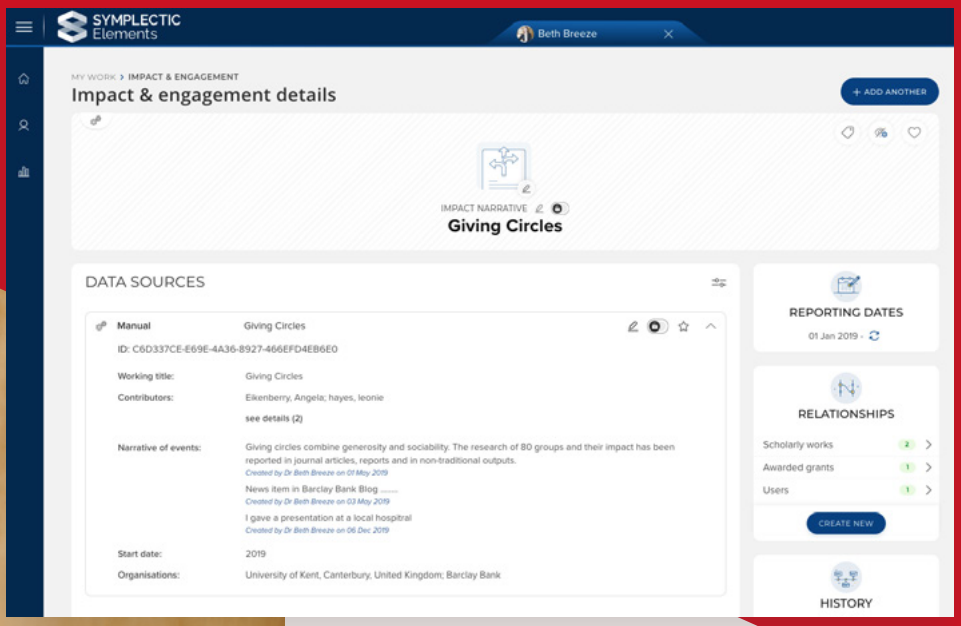
Impact Module

For many disciplines, citations and bibliometrics remain a well-used (albeit controversial) means of evaluating the academic 'impact' of research. However, evidence of the wider effects of impact cannot always be captured via traditional metrics. The introduction of the 'impact' element was a key change for the REF2014, to be showcased via impact case studies and qualitative statements on the institution's approach to research impact.

For the purposes of the REF, 'impact' is defined as an effect on, change or benefit to the economy, society, culture, public policy or services, health, the environment or quality of life, beyond academia.

Within Symplectic Elements, we introduced the Impact Module to provide an easy method for not only capturing evidence of impact - be that a document or web link - but also for authoring a narrative that explains the relevance and context of this evidence. With the Impact Module, institutions are able to help inform the creation of impact case studies as part of the REF submission process, as well allowing researchers poorly served by traditional citations to provide qualitative evidence of the impact of their work.

Elements' Impact Module enables researchers to capture details and evidence of the impact of their research.



Specialist Services & Support

The dedicated REF team within Symplectic also offered specialised and highly specific support to participating institutions, including:

- 39 REF-related articles in the support portal,
- Participative seminars following each functionality release,
- A 'REF2 attribution algorithm' designed to support institutions in attributing REF2 outputs to REF1 researchers, customised to institutional strategy and acting as a 'first pass' report template to help institutions ensure the highest possible quality of submissions.

REF 2021 CASE STUDY

University of Essex: Streamlining the REF through Annual Assessments

Phineas Wenlock, Research Systems Manager

The University of Essex (Essex) managed their REF2014 process manually, using a complex combination of its EPrints repository, spreadsheets, word forms, and Research England's submission system. "I wasn't involved in that initial process," explained Phineas Wenlock, Research System Manager at Essex, "But I understand it was a bit of a nightmare."

Having adopted Symplectic Elements in 2016, Essex cleverly utilised the Assessment Module to run an annual output nomination and review process for the three years running up to REF2021. "That allowed us to monitor our progress and meant that we had a ready pool of REF outputs to make a selection from," said Phineas.

Essex managed all REF1 (staff) and REF2 (outputs) data within Symplectic Elements. The majority of staff were already populated within Elements as part of Essex' successful adoption of the system, though a minority of former members of staff needed to be added as part of the REF process. "We did it that way rather than try to manage those in the submission system afterwards, because it meant that we could manage and report on the whole process," said Phineas. Essex also used Elements to source impact information and evidence for REF3 impact case studies, becoming an adopter of the newly introduced Impact Module. "The Impact Module was really useful for collecting impact case studies."

The ongoing review process was highly effective in streamlining and accelerating the process once the time came to prepare their REF submission. "When it came to doing the Select, Accept and Attribute process, pretty much everything was there - it was just a case of working through outputs to accept them, checking the compliance, tightening up the metadata and applying an overall score to those outputs."

So how did it go? "It went pretty well. We added all the data around our UoAs and research groups, and that worked really nicely. All the workflow and filtering tools made managing the process pretty straightforward. I don't think we would have coped without the Open Access checking features," explained Phineas. "The validation checking in Elements was really useful; although it didn't pick up things like Category B outputs being published outside of contract dates, it picked up nearly everything - so by the time that we got to the point of loading the XML into the system there wasn't a lot to tidy up."

> In 2021, we submitted just over 700 FTEs in 17 Units of Assessment, 1678 outputs and 67 impact case studies. If we tried to do that using the old method I dread to think what would have happened, so Elements was really invaluable in getting our REF submission in."
>
> Phineas Wenlock
> Research Systems Manager,
> University of Essex

While running an ongoing review and assessment process brought obvious benefits for Essex, it also threw them a few curveballs along the way. "We had a few weird things where outputs had been reviewed and then removed and then replaced, trying to wrangle them back in so that they were selected for submission, so there was a bit of management there."

So how does Essex envisage the process of preparing for the next REF?

"We didn't take up Symplectic's offer of using the REF2 attribution algorithm to create a 'Best Profile', but after I'd gone through the first two or three UoAs I kind of wished I had!", said Phineas. "Fortunately all the tools in the system made it fairly easy to do that, so what we did was present each UoA Lead with a 'Best Profile' based on raw GPA, and allowed them to feed back to us based on their own knowledge and preferences. We didn't give access to the REF module to UoA leads; the next time we go through this process, we'll definitely work with a more devolved model and give more people more access."

Image Source: Nick Caville / Wikipedia Commons

REF 2021 CASE STUDY

Anglia Ruskin University: Moving from Manual to Systematic Curation

Anglia Ruskin University (ARU) has had a Symplectic Elements instance in one of its Faculties since 2008, but it was not until 2016 that they began to consider its value institution-wide and with one eye on its potential value as part of REF preparations.

In its preparations for REF2014, ARU had carried out all aspects of the exercise "pretty much manually, dealing directly with Word files and then uploading into the REF submission system," said Dr. Tim Brooks, Head of Research Excellence & Enhancement. "The idea of having a system which could automatically pull from things like our institutional repository was a wonderful thing to look forward to as REF2021 preparations started to kick off in earnest".

ARU was one of the earliest adopters of Symplectic's Repository Tools (RT2), which enables bidirectional integration via API with institutional repositories such as Figshare for Institutions, EPrints, DSpace, Hyrax, or other home-grown repositories. With RT2 implemented successfully in Summer 2018, ARU was asking its academics to deposit open access works solely via Elements by early 2019, giving them a rich, integrated and consistent record of research outputs.

"A wonderful thing for us was that with RT2 we were able to get data back out of our repository again - so everything that was sitting within Elements was ready to be used in our REF preparations," said Tim. "We knew that the data had been curated by colleagues over in the library who look after our repository and it would therefore be completely reliable and of very high quality. That was wonderful by comparison with the manual approach of yesteryear."

Given the familiarity with manual approaches, the complexity of managing the REF process, and the small size of the team, ARU made a decision not to migrate the entirety of its REF information collation and review processes into Symplectic Elements ready for REF2021. "We were kicking off our first REF stock take just at about the point we decided that having Elements institution-wide would be a good thing," explained Tim, "We had a lot of data coming into Elements from our institutional repository and also some data from our HR systems, but not very much in terms of what was needed in the REF."

ARU's primary use-case for Symplectic Elements as part of the REF preparation process was "first and foremost as a source of research information, so it was the route via which our academic colleagues were depositing their research work so that there was a record somewhere." Elements was also used as "an additional source of information to augment the stock takes and the mock exercises we were carrying out", playing a particularly critical role as a sense-checker and validation tool. "When we saw information coming back in from colleagues and something didn't look right, the first port of call to check it was usually Elements", said Tim. "What we found extraordinarily helpful was all of the validation routines that are built into Elements, so we used those both for validations and other various functionalities built into Elements to cross-check."

> The idea of having a system which could automatically pull from things like our institutional repository was a wonderful thing to look forward to as REF 2021 preparations started to kick off in earnest."
>
> Dr. Tim Brooks
> Head of Research Excellence & Enhancement,
> Anglia Ruskin University

By 2019, collation of information outside of Elements as part of the REF preparation process was fairly progressed, and the team at ARU began to utilise the REF functionality within the Assessment module more fully in order to prepare submissions. This meant some parallel processes were carried out while workflows were migrated into Elements. "At that point we started creating submissions within Elements, and that was really helpful: for example, the survey on submission intentions had questions like 'How many book chapters are you going to submit?', and we were able to use Elements to get that data out very easily."

Image Source: Anglia Ruskin University Image Library / Wikipedia Commons

ARU's central REF team curating and preparing submissions in Elements worked closely alongside Faculty-based Unit of Assessment convenors, who were also involved in aspects such as writing impact case studies and environment statements. "We thought about training our convenors to do some the work curating submissions in Elements, but we thought especially with everything else going on while we all adjusted to new ways of working due to COVID, asking them to do the curation within a new system was not the wisest of things to do."

This meant that as an interim measure the REF team needed to act as a proxy within Elements for the role of UoA conveners, selecting and attributing outputs within the module. They then ran reports from Symplectic Elements of the submissions during development and shared these with the convenors for them to cross-check before final XML loads into the Research England REF2021 submission system; a process which was time-consuming and "a bit of a scramble".

It is clear that running parallel workflows both inside and outside of Elements while transitioning from historical manual processes toward something more digitised and automated presented a considerable challenge to the university, particularly during a time when working arrangements were interrupted by the global pandemic and faculty got to grips with new ways of remote working. However, Tim is clear both that the process was a huge improvement on previous exercises and that REF2021 represents a stepping stone toward running the full REF preparation process within Symplectic Elements next time around.

"This is my third of these exercises; both RAE2008 and REF2014 involved a lot of curation directly within the submission system itself. The formal submission systems were slow, they were clunky, they fell over from time to time. While the prospect of relying on an XML upload with this particular approach in REF2021 was daunting until we'd done it a few times, somehow working to create a data set within Elements felt much simpler and more comforting. Knowing where the data was coming from was really helpful; because it was consistent, validated, and of good quality, it felt much less necessary to check and recheck everything."

So how does ARU envisage the process of preparing for the next REF?

"We think that getting the Assessment Module into use to support a rolling programme of quality assessment would be the way to do it," concluded Tim. "We'd do away with all our offline spreadsheets, which were extremely frustrating to work with and manage. We want to train our staff to identify outputs and provide assessment scoring through Elements, and then train our conveners to manage output assessment and attribution in the way Elements' REF functionality is ultimately designed to do".

REF 2021 CASE STUDY

University College London: Meeting Open Access Requirements

University College London (UCL) have been using Symplectic Elements (internally referred to as the Research Publications Service) since 2009. "Everything to do with outputs, we manage in Elements," said Adam Cresswell, Institutional REF Manager at UCL. Elements integrates with UCL's open access repository, UCL Discovery, which is leveraged to meet both the requirements of the UCL's own publications policy and the REF open access policy.

The REF open access policy was introduced in 2016. UCL encourages authors to upload their manuscripts to the Research Publications Service (RPS) as soon as possible after the date of acceptance, and no later than 3 months from the first publication date. Since the policy took effect, UCL has been making heavy use of the 'Open Access Monitor' reporting dashboard within Symplectic Elements.

The OA Monitor provides a centralised view of what research outputs could or should be made openly available. When combined with information on what has already been deposited, institutions can gain powerful new insight into engagement levels. Administrators can filter publications by parameters to review how well the institution is progressing toward compliance, record exceptions, track library status and even make deposits on behalf of researchers.

The OA Monitor offers a range of REF-related report templates; however, UCL's requirements meant that they opted to commission Symplectic to develop custom reports. These are used for sending monthly updates to faculties and departments, tracking compliance levels, and listing papers that are in scope of the policy but not yet uploaded. The reports pull out open access compliance status and exceptions that are applied in the OA Monitor.

Research that needs to be made openly accessible is highlighted on researcher's RPS homepages, and Elements can be used to actively prompt researchers by sending email reminders for papers that haven't been uploaded. UCL found that sending email reminders to authors, as well as reporting compliance to faculties and departments, was crucial to achieving REF open access compliance. Elements has an option to display Sherpa/RoMEO embargo information as standard, and institutions can also provide custom guidance at an institutional, publisher or journal level.

"The OA Monitor was pretty critical to our REF open access compliance monitoring - I can't really imagine doing without it," said Alan Bracey, Open Access Compliance Manager at UCL. "Our open access compliance drive depended upon monthly reporting and chasing authors to deposit their papers, which relied on using OA Monitor to track and fix papers, add exceptions, that sort of thing. The semi-automated deposit email reminders that we started using about halfway through also proved essential to getting our compliance levels up."

> The OA Monitor was pretty critical to our REF open access compliance monitoring – I can't really imagine doing without it."
>
> Alan Bracey
> Open Access Compliance Manager,
> University College London

UCL utilised Symplectic Elements to manage and prepare submission of all REF2 (outputs) data, handling REF1 via their HR system and REF3 manually outside of the platform.

"The biggest thing was that Symplectic had to keep up with the pace of the changes that were going on with the REF - so not only the fact that publication of guidance was delayed, but also there was a big rule change and the system needed to be updated to meet those needs; and then on top of that there were other changes going on because of the COVID rules", said Cresswell. "Elements on the whole was really good; it was improving as we went along in terms of some of the tools in the background for reporting."

How does UCL envisage the process of preparing for the next REF?

"There were things we would like to automate even more, things like impact case studies; we added all of those manually," said Cresswell. "The hardest part was that the REF changed from 2014 to 2021 - so for the next REF exercise, I'm hoping that the rules are going to stay broadly the same so we can pretty much have an out of the box workflow."

Image Source: Newsam Library / Wikipedia Commons

Liverpool John Moores University: Two Successful REF Cycles

Liverpool John Moores University (LJMU) has been using Elements since 2009, and leveraged the system for both REF2014 and REF2021 submissions. They were another early adopter of the OA Monitor, embedding it into their open access workflows in 2016.

"Obviously open access was the major change from REF2014, and having the OA Monitor in Elements eased us into that space and facilitated good working relationships across professional services in the University well ahead of the REF2021 submission," said Dr. Diana Leighton, Head of Research Excellence and Research Strategy at the University, "That meant much of the OA checking for REF2021 was straightforward, albeit time consuming!"

Between the two REF cycles, individual schools across the university conducted their own ongoing internal and external review exercises of outputs outside of Elements, managing the process manually in spreadsheets. "There was some reluctance by REF Unit of Assessment coordinators to use the Assessment Module for the mock activity, as keeping records manually had been working well," said Diana, "However, once the REF2021 was more developed and our likely submission was created, the coordinators engaged better with the workflows in Elements and we started reviewing outputs in Elements as part of the mock exercise in November 2019."

Following the mock review in 2019, LJMU continued to use the Assessment Module to create output submissions (REF2) linked to individual staff. The configuration of the University's HR system made bulk upload of information into Elements difficult, so staff census data (REF1) were added manually.

> The support we received from Manya Buchan and Symplectic colleagues was incredible. I know the team had to work at pace to get the REF functionality ready given the guidance and submission system requirements were late coming out."
>
> Dr. Diana Leighton
> Head of Research Excellence & Research Strategy,
> Liverpool John Moores University

Like many institutions we spoke to, LMJU found Elements invaluable when it came to doing validation checks on their data ahead of submission. "The REF2021 Dashboards were really useful in terms of checks for completion and quality, and provided decent visuals to share," said Diana. "Bulk actions and data exports for checking and validation made quality control an integral feature within Elements, so there weren't too many validation errors within the REF2021 submission system itself. Data export from Elements into the submission system was pretty seamless, which was a big relief!"

Having had success with the REF functionality in Elements for two cycles, what improvements is LJMU considering for next time?

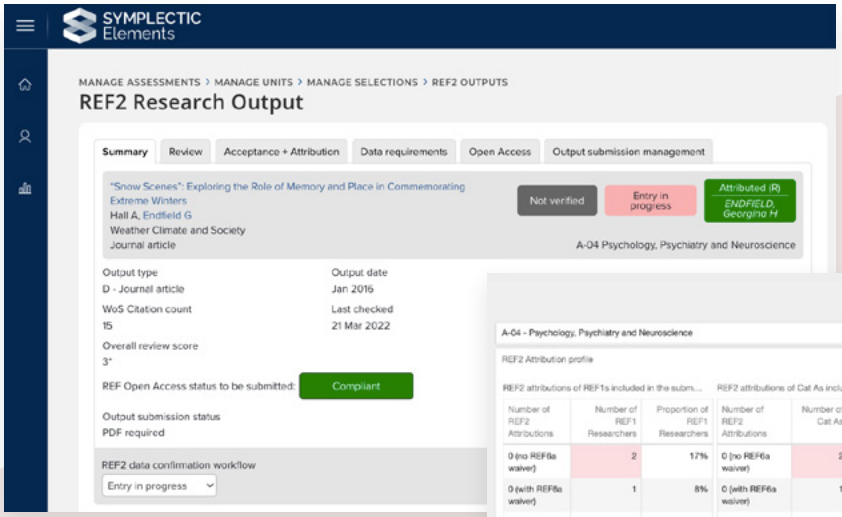
"I don't think we constructed the review workflows for the 2019 mock exercise optimally in the Assessment Module," said Diana. "We also don't use that module for any other activities currently, and I'm sure there are other manual processes across the institution that we can apply its functionality to."

Image Source: vitastudent.com


Liverpool John Moores University

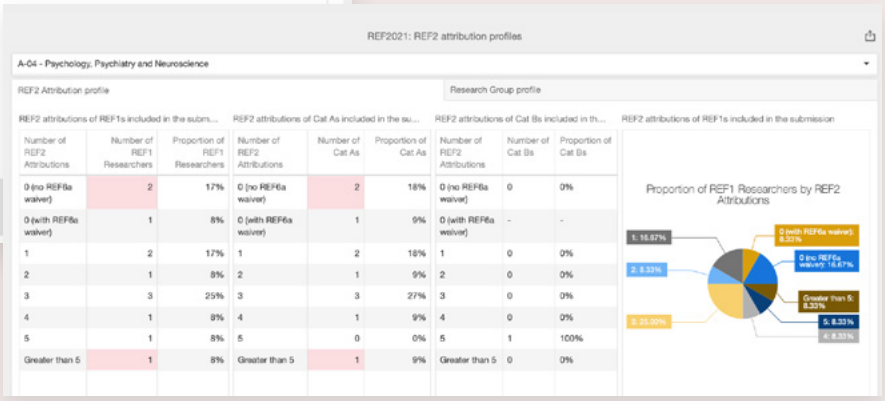
Conclusion

Functionality within Symplectic Elements was updated following the publication of 'Initial decisions on the Research Excellence Framework 2021', based in part upon the recommendations of the 2016 independent review of the REF led by Lord Stern.



The REF2 screen enabled capturing all required metadata, managing attribution, and output submission requirements.

Elements' REF2021 functionality included a number of stock dashboards and reports, helping submission managers to monitor submission preparation progress and submission attributes.



The Symplectic REF Team worked closely with the steering group following the publication of the new guidelines, rapidly revising the approach to metadata structures and realigning workflows to fit the new regulations in real-time.

"Elements captured metadata and other aspects very comprehensively," said Diana, "The support we received from Manya Buchan [Symplectic's REF subject expert] and Symplectic colleagues was incredible, and I know the team had to work at pace to get the REF functionality ready given the guidance and submission system requirements were late coming out."

As part of his 2016 review, Lord Stern noted that "Research information systems (RIS) play an increasingly important role for the governance of research at the institutional, funding body and national levels". The change in approach engendered by this recommendation was notable between REF2014 and REF2021, with the Symplectic team able to build a much deeper relationship with the Research England REF team ahead of REF2021 - including direct lines of communication and the facility to log in to the REF2021 Submission System in order to more accurately interpret the REF data model and validation requirements, and to test interactions between systems.

"That change made a big difference from where we were in 2014," said Manya Buchan, "We will continue to grow the relationship with the Research England REF team in future, with the aim of ensuring Elements continues to meet our institutional clients' needs for REF submission preparation and management."

Symplectic carried out a debrief with clients following the REF2021 submission deadline, exploring what worked well and potential areas of improvement. We will continue to solicit feedback from users and to update and grow functionality in line with REF guidance as it changes and evolves.

"We recognise that the REF can be a time-consuming and burdensome process, both for institutional staff and for researchers," said Jonathan Breeze, CEO at Symplectic, "Measurement of research excellence and impact can be a complex and controversial subject, and we appreciate the continuing thought that the UK's higher education funding bodies are putting into improving and streamlining the process."

Symplectic is looking forward to meeting the challenge of that complexity once again for the next REF exercise, and further exploring ways to remove administrative burden, make data more joined-up and reuseable, and - above all - support and empower the research community.

We will continue to grow the relationship with the Research England REF team in future, with the aim of ensuring Elements continues to meet our institutional clients' needs for REF submission preparation and management."

Manya Buchan

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