Bibliometrics are *measures of output* and *indicators of impact*.

Probably the simplest bibliometric is a count of publications. More advanced bibliometrics help you to understand the impact of your academic publications within the scope of the worldwide research community.

You can use bibliometrics to look at *different types of impact*.

Your impact at point of publication:
- What are the top journals in your field? Where should you aim to publish?
- Have you been successful in getting your paper into an above average journal for your research area?

Your impact post publication (otherwise known as citation impact):
- How many times has your paper been cited?
- Has your paper attracted more citations than normal?
- Who is citing your work? Which researchers from which institutions?

Your impact through knowledge transfer:
- From which subject areas are most of your citations coming?
- Are any research fields outside of your own unexpectedly interested in your work?

Your impact through collaboration:
- Who do you publish with most? And, who do they publish with most?
- How international is the scope of your collaboration?
- Are you overlooking any potential collaboration opportunities?
There are three key points to bear in mind with bibliometrics.

1. **Always use multiple metrics**
   Output and impact are measured in different ways, so they need different bibliometrics. The same holds true for the different types of impact. Using a set of metrics, rather than just one or two, will give you a better, richer picture of how things stand.

2. **If you want to compare, use normalised indicators rather than absolute counts**
   It doesn't matter that you have 50 citations and a colleague has only 30—you don't necessarily have the higher citation impact. Citations practices vary from field to field, older papers have had more time to attract citations than newer papers, and some document types, for example reviews, are cited a lot more than other types of academic work. The only way to compare fairly is to take into account differences in subject area, publication year, and document type. Normalised bibliometric indicators do this; absolute counts and averages do not.

3. **Combine bibliometrics with expert knowledge and peer review**
   Even if they are multiple and normalised, bibliometrics can't possibly tell the whole story about publication quality. Numbers can help to standardise aspects of quality but human judgement and experience remain key to grasping the intricacies of quality. Bibliometrics supplement—not replace—expert knowledge and peer review.

Want to see bibliometrics in action? Why not have a look at our [SciVal Quick Guide](#) or attend a bibliometrics training session? SciVal is an online bibliometrics tool that lets you explore and monitor your academic output and impact. Bibliometrics training is available year round through the Researcher Development Programme, Faculty Engagement Librarians, and the University Staff Development Programme.

March 2015