

The science behind great web content

How qualitative and
quantitative data, equations
and experiments deliver on
user experience and need

Web Content: Part II

From Newcastle. **For the world.**



To create great web content you have to:

Understand and empathise with your users

This means that for each of our audiences, we need to understand their:

- needs
- frustrations
- language ability
- expertise levels
- accessibility issues

Only when we understand our users will we give them the content they need.

If our business goals lend themselves to user needs, then **the right content will convert prospects and enhance our brand.**

Achieving an understanding of audiences requires:

Qualitative and quantitative data

Desk Research

Analytics and heat maps

Survey analysis

Keyword and search analysis

Social media monitoring

Competitor analysis

User Engagement

Interviews

User focus groups

User testing

Survey analysis

Live chat/Unibuddy

Stakeholder Engagement

Identify business needs and goals

The Discovery phase data feeds into the development of user personas and user journeys. These give you a **fundamental understanding of user needs and frustrations.**

Quantitative data – Desk research

Analytics and heatmaps

Segmenting data in **Google Analytics** and looking at bounce rates helps you discover where users are dropping off or find pinch points in user journeys.

This data **helps us determine where, and occasionally what, is hindering a user journey**. User testing can then help validate assumptions about why users are dropping off and find solutions to the issue.

Heatmaps and videos from solutions like **Hotjar** can also help identify the elements of a user journey that are being interacted with. This information helps you identify:

- if calls to action work
- if there is unnecessary content on a page
- whether users are scrolling

Quantitative data – Desk research

Survey analysis

Surveys can **provide both quantitative and qualitative data.**

If enough people tell you they're annoyed by your user journey but don't necessarily tell you why – that's valuable. You **know something's not working for them.**

That's the quantitative aspect of surveys.

The **qualitative aspect** is when a few of them **actually tell you what they can't find or achieve** through the user journey they've been on.

This gives you the **insight to be able to include the missing content or make it easier to find.**
Remember, you still need to validate your solution with users via testing.

Quantitative data – Desk research

Keyword and search analysis – Content SEO

It's **vital we understand how the audiences we want to attract might find us**. At a basic level, we need to know what within our content might attract them to our websites.

To do this, **we need to leverage keywords/phrases**. There are a variety of SEO tools to do this, some more advanced than others. Probably the easiest to get to grips with are:

- **Google Trends** – tells you which keywords and phrases from your content trend well globally
- **Google Search Console** – tells you what specific terms are leading to interactions with your pages

You can look at **your internal search** (Funnelback) to get an idea of what people are searching for when they've already arrived on your website.

This allows you to **build terms into your content that will drive additional traffic** to your page.


Quantitative data – Desk research

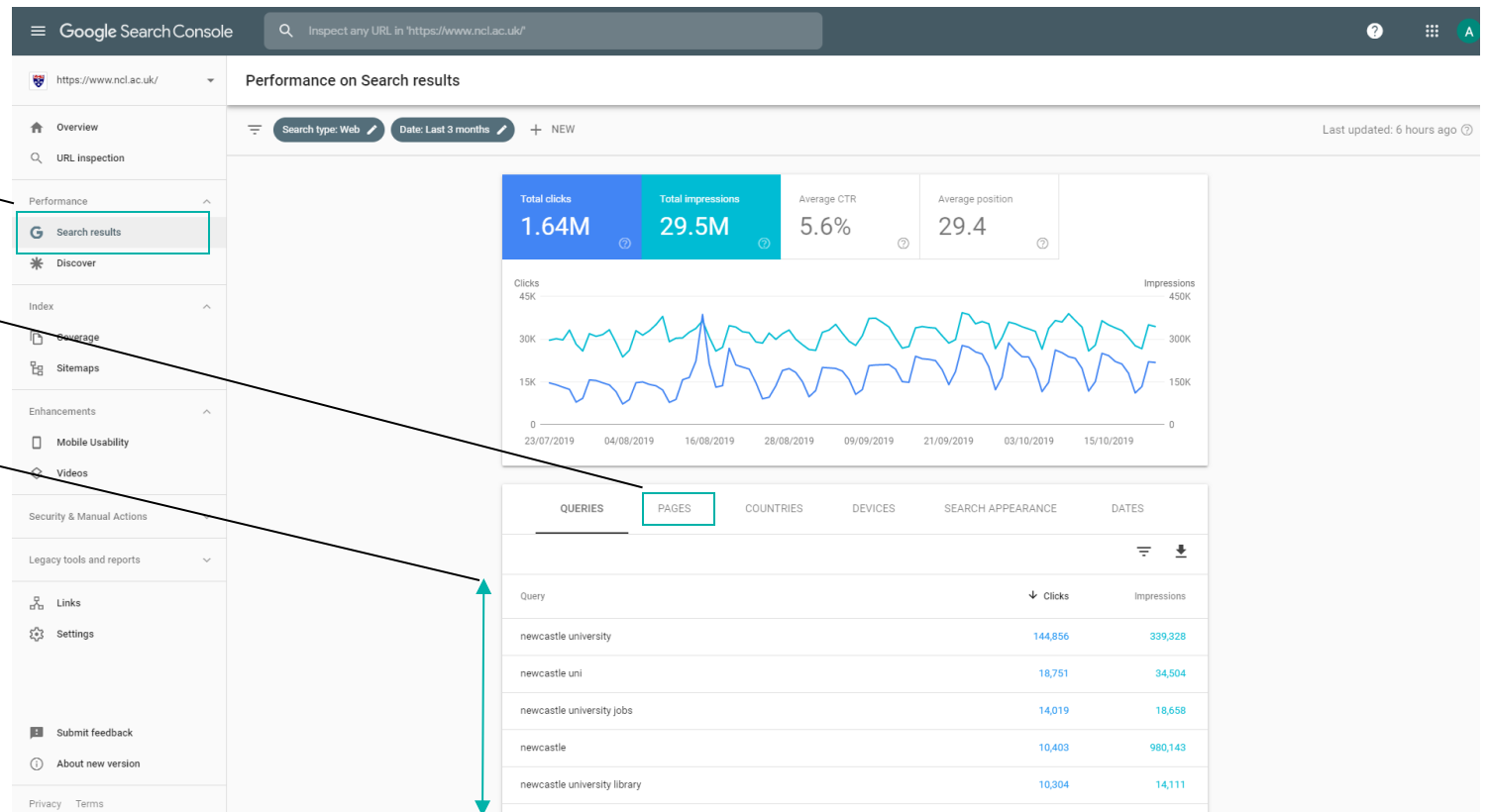
Keyword and search analysis – Knowing your way around Search Console

Find data on **how the site appears in Google**. This includes organic traffic, average positions and more.

View a full **list of pages on the site**. From this list, click the page most relevant to you to only see data for that page

Here is a list of keywords that the selected page ranks for. Select the boxes along the top for a full insight.

Use the  icon to **filter the results**. From here you can omit results with Newcastle in them, for a better idea of the terms potential students use to arrive on our site



Quantitative data – Desk research

Keyword and search analysis – Content SEO best practice

A **page or meta title is the first impression a user gets** of your site when they search for a product, service or query.

Not only does it indicate to users what's on your page, it's also used by search engines to decide **how relevant you are** to a user's needs. As such, **page titles shouldn't exceed more than 50-60 characters** and should always **include your target keyword**. Avoid jargon, acronyms, course codes and anything a search engine or new user wouldn't understand.

Page title maximum length is roughly **60-50 characters**

n500 - Marketing BSc - Undergraduate - Newcastle University
<https://www.ncl.ac.uk/undergraduate/degrees> ▼
Marketing identifies, anticipates and satisfies customer needs and is integral to MKT3012
Direct and Digital Marketing · MKT3014 New Product and Service ...

Poor example

VS

Study Digital Marketing | Undergraduate | Newcastle University
<https://www.ncl.ac.uk/undergraduate/degrees/>
Study at an internationally renowned, triple accredited business school. Join the business leaders of tomorrow, find out about 2020 enrolment with us, here.

Meta description maximum length is roughly **120-158 characters**

Good example

Quantitative data – Desk research

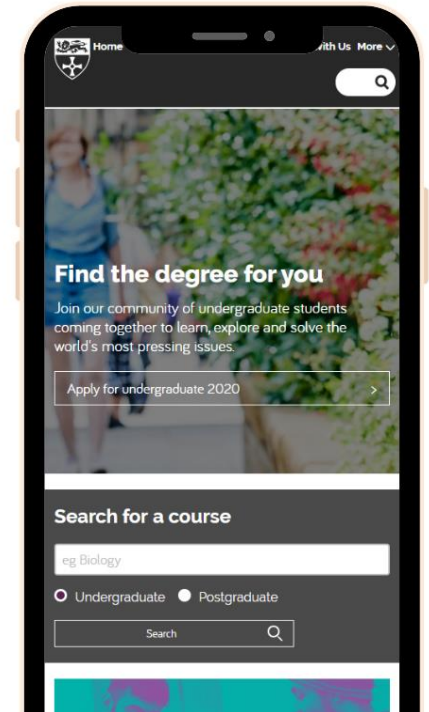
Keyword and search analysis – Content SEO best practice continued

Metadata

- **Include your main target keyword.** Google will embolden a keyphrase if it's in the description; this can improve click-through rate.
- Including **numbers in meta descriptions** has been proven to increase click-through rate.
- Pepper **calls-to-action throughout**, such as 'find out more,' 'study with us,' 'forge your career'.

On-page copy

- Include target keywords (gathered from keyphrase research) naturally throughout the copy.
- A good ratio is usually **5 keywords per 100 words of copy**, but this isn't prescriptive.
- The majority of organic traffic comes from mobile. So, **accommodate smaller screens** by using **bullet pointed lists, clear and SEO-optimised subheadings and short paragraphs.**
- Make sure anchor text is descriptive. Only link to relevant, internal pages within your own respective site.



Quantitative data – Desk research

Social media monitoring

Keeping your eye on the **platforms that your users use to interact with each other is vital**. We're not just talking about Instagram, Facebook etc

The Student Room and **Campus Society** are dedicated to University student recruitment audiences and are vital ways of picking up:

- **keywords and phrases for content** – students might call it something different to academics
- **pinch points and usability problems** – users saying they can't find what they're looking for on our website within these forums
- **grumbles about the University** – quality of teaching or accommodation, which are things to feedback on but also counter with the right kind of messaging

Even academics tell us about problems they have with website content on Twitter.

Quantitative data – Desk research

Competitor analysis

As with most quantitative data, you **must validate any assumptions you make from competitor analysis**.

If you go ahead and assume your competitors are doing it right online – you may be sorely disappointed.

It's important to recognise that **your competitors have approaches that might be valuable** to the development of your content.

But it's also important to remember that you don't have any data about whether these approaches work or not. You **can't be sure that they've validated their approach**.

Therefore, while it might provide useful data, it's not ideal to rely on 'they're doing it that way' as a reasoned approach. **Test, test and test again.**

Qualitative data – User engagement

Interviews and user focus groups

Understanding your users is fundamental to creating great web content.

The only way to do this effectively is to... talk to them.

Interviews with individuals from your audiences will build knowledge of personas and journeys and highlight frustrations.

Just doing half a dozen interviews can build a powerful picture of user needs.

Focus groups can build the same picture, though only when they're carefully moderated.

There can be a tendency for one user to **bias the views as a dominant voice** within groups.

Qualitative data – User engagement

User testing

User testing is **incredibly important**. How do you know that the content and design you provide for your audience works? You don't. Unless you test it.

Quantitative data will only tell you if something does or doesn't work. It won't tell you why.

User testing existing solutions in a Discovery phase, and testing prototypes within Alpha, Beta and Live stages means **you leave nothing to doubt or assumption**.

If you can identify which sentence or word might be tripping up your user (and it can be that detailed), then **you're in the position to fix the problem**.

If you test your fix and it works, then you've **removed a pinch point or drop-off** in the user journey.

Qualitative data – User engagement

Live chat and Unibuddy

After more than a year of being installed, **live chat is proving to be a popular means of communication.** We've used it effectively to make offers during the past two Clearing campaigns.

The return on investment from live chat is huge. But **we shouldn't overlook the rich data we can collect** from the system, in terms of users identifying what might be missing from our websites.

Interactions with operators can **flag up issues with our website content.**

Users asking similar questions of our operators mean there may be an underlying issue with them not finding the content or it not being there in the first place.

Prospective students' **interactions with our student ambassadors on Unibuddy can also flag up pinch points** within our web presence.

Stakeholder engagement

Our stakeholders (academics, service heads etc) are **aware of the needs of the business**. They might also be able to shed some light on user need through interactions with specific user groups/personas.

So they can **provide business goals, and, sometimes, quantitative and qualitative data**. However, their opinions shouldn't be taken as absolute fact.

Opinions can be the undoing of great web content and design. As with everything, assumption needs validation.

Test, test and test again.

Stakeholders are vital for understanding of how content might feed into business goals, but **shouldn't dictate how a user need is met**.

It should be the user that does that.

Why do this research?

The research we do informs the quality of the impact we make.

Applying data and evidence to the content we produce makes it as valid as the work of any academic unit within the University.

To deliver great content to your audiences, you need to:

Understand how your users read on the web

To do this, we usually talk about '**best practice**'. At this point, we usually lose people who think 'best practice' is based on our opinion.

Our 'best practice' is defined by the **extensive qualitative and quantitative research** carried out **by a variety of experienced user-centred design practitioners**.

These include:

- **Nielsen Norman Group**
- **Government Digital Service**
- **Content Design London**
- **Brain Traffic**

So how do users read on the web?

Nielsen Norman Group's extensive research provides the answers.

Their work is celebrated in this arena, to the extent that the **Government Digital Service and many others cite it as 'best practice'**. Their findings, through qualitative and quantitative data research, include:

- [Text Scanning Patterns: Eyetracking Evidence](#)
- [F-Shaped Pattern of Reading on the Web: Misunderstood, But Still Relevant \(Even on Mobile\)](#)
- [The Layer-Cake Pattern of Scanning Content on the Web](#)
- [How Chunking Helps Content Processing](#)
- [Inverted Pyramid: Writing for Comprehension](#)
- [Reading Content on Mobile Devices](#)
- [Website Reading: It \(Sometimes\) Does Happen](#)
- [Horizontal Attention Leans Left](#)
- [Plain Language Is for Everyone, Even Experts](#)
- [Writing Digital Copy for Domain Experts](#)

This body of research provides us with a **'best practice' manifesto for the display of content.**

The equation for Readability

To achieve the best results for scan readers, **we need to keep sentences short and active.**

Applying the [Flesch-Kincaid Grade Level Formula](#) helps define how easy it is to read content.

The formula: **(0.39 x average sentence length) + (11.8 x average syllables per word) - 15.59 = grade level**

Generally, it prescribes that Plain English content should mean:

- **sentences of no more than 20 words**
- **active rather than passive voice**
- **a readability score of 60+ out of 100 based on the formula**
- **a grade level of no greater than 9**

$$0.39 \left(\frac{\text{total words}}{\text{total sentences}} \right) + 11.8 \left(\frac{\text{total syllables}}{\text{total words}} \right) - 15.59$$

Nielsen Norman Group's research with website users helps us determine how easy it should be for our audiences to efficiently read our content.

- **General = no greater than grade level 9**
- **Expert = no greater than grade level 12** ([this accepts a certain level of necessary jargon](#))

But best practice only gets you so far.

That's because **it's general guidance and not bespoke to individual organisations.**

To make content for our specific audiences great, we need to:

Test and iterate

Bringing it back to science, **when we have the initial quantitative and qualitative data, we have a hypothesis.**

Once we've done all that research in Discovery, we need to write the content in Alpha and validate what we've written with our users.

We can **create a prototype and then we need to conduct experiments** to see whether it works.

Why and how we test with users?

Jakob Nielsen explains the purpose of user testing in a [three-minute video](#).

It accompanies the article: [Thinking Aloud: The #1 Usability Tool](#)

Additional articles can be found:

- [Practical Advice for Testing Content on Websites](#)
- [Testing Content Concepts](#)
- [Web Testing is the New PR](#)

Useful blog – [UserFocus](#)



So there you go ... it's a science

To create great web content, you need to:

- conduct **research**
- gather and interpret **qualitative and quantitative data**
- **hypothesise** solutions and **prototype** them
- use complex **equations**
- **experiment** with users

Only when you go through these processes will you create effective content that helps achieve user needs and business goals.

That's great web content.