

Discovery for a resource to support prospective higher education students with decision making

Findings and recommendations



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Executive summary

User research identified a need for a resource that helps students navigate the information landscape, access the relevant information when they need it in the decision making journey and enable all students to make sense of the information.

We have interviewed the following people as part of the project:

23 young students

5 mature students

4 parents

8 careers advisers / teachers / agencies

A number of common themes came through in these interviews:

- Prospective students approach this from a range of different starting points
- There is a lot of information available in different places to prospective students
- Young people often want support to help make the right decision
- There is a user need to provide information that counters myths, biases and unknowns

Our core recommendation from Discovery is to progress to the Alpha phase to try to identify answers to the following questions that have fallen out of the user research we have carried out:



How can we best support people to make informed decisions about higher education?



How do we personalise the service based on what's important to people?



How do we present a range of information in a way that makes sense to all?

Introduction and approach

Organisational context

Whether or not to pursue higher education is a significant decision regardless of whether you are a school leaver or an adult returning to education. For some it is not an active choice, and they may not ever consider it, while others are compelled by various motivations, such as career aspirations. Understanding whether to undertake higher education, and then choosing a course can involve considering a complex range of factors, and there are few parallels to this decision.

To further its aim to support all students to access and succeed in higher education, the Office for Students wants to ensure that prospective students can make confident, informed decisions about higher education. By doing so, we anticipate that better-informed decisions will help lead to better longer-term outcomes for students.

We have investigated the behaviour and thought process around higher education through qualitative research.

We conducted a number of interviews with prospective students, parents and teachers to enable us to understand how the OfS can support students and those who advise them to understand higher education and the options available to them.

As an example of some of the feedback we have received, one young person told us about a female friend who is being repeatedly ordered by her parents not to go to university when she is clearly talented and suited to that pathway.

Purpose and scope

The purpose and scope of the project were as follows:

Purpose of project

- Discover if there a user need for a new resource to help prospective students.
- Gain insight into prospective students' decision-making, pain points and needs.
- Based on emerging evidence, shape ideas for a new resource to help *all* prospective students make well-informed higher education course choices.

Scope

- Carry out user research with prospective higher education students (school leavers and mature adults), parents / carers, advisors, teachers.
- Review existing research around student choices.
- Investigate the need for a new resource to support the decision-making journey about higher education.
- Make recommendations to that effect in terms of next steps.

Discovery phase



Discovery is an information-gathering phase designed to dig deep into the details of what is important to the user.



Ongoing user research at the heart of the agile process, ensuring we build user focused services. We use this to understand who our users are, their needs and how we're meeting them.



We develop initial service design through collaborative workshops, and build wireframes to visualise these.



We assess the data landscape to determine how we might build a technical solution.



We make recommendations about the Alpha phase.

The Discovery phase is followed by the Alpha phase when sufficient user need is identified.

Structuring the project

We have run this project using agile techniques and via a number of regular meetings to provide structure to the project.



Sprint planning:

Plan the work for each sprint – or two-week period of work.



Daily stand-ups:

Team members outline what I did yesterday; what I will do today; blockers



Show-and-tells:

Play back our achievements from each sprint. Short slide deck summarising progress for those who can't attend show-and-tell.



Retrospectives:

Team event to discuss continuous improvement of how the team works together.



Final discovery playback outlining findings and recommendations.

The users

We have gathered feedback from a total of 40 people.

23 young students

5 mature students

4 parents

8 careers advisors / teachers / agencies

Demographics

- A mix of people from different locations including England, Wales, Scotland, Northern Ireland and abroad
- People from different income groups
- People from different ethnic / cultural backgrounds
- Students not going into HE
- International students
- Assisted digital students

Main user research questions

Motivations / influencers: What and who motivates people to consider higher education?

Knowledge of higher education: What are peoples' thoughts around higher education?

Decision making process: What does the decision making process look like and what information do people need along the journey?

Finance: What role, if any, do financial aspects play in higher education decision making?

Geography: What role does geography play in relation to higher education choices?

Concerns / challenges: What are the key concerns and challenges in relation to higher education?

Expectations: What do people expect from the higher education experience and what are their dreams after completing higher education?

User research techniques

A **review of existing research** to identify potential gaps, get a high-level understanding of the wider context and shape initial user research questions

Ethnographic **face-to-face and phone interviews** to get an in-depth understanding of who the users are, what their needs and pain points are and to be able to see things from their perspective

Guerrilla research at schools, college enrolment events etc. to explore context of service, potentially recruit and identify initial user needs and pain points

Focus group with different personalities to explore high level themes, user needs, pain points and to facilitate co-creation sessions

Themes from user research

Different starting points

- Students have different motivations for pursuing HE
- Students are influenced by many different media and people
- Students have different understandings of what success is
- Overall, students have 3 different starting points when considering HE
 - I have a career in mind
 - I'm following my interest
 - I've done really well in this subject

"I want to work as a detective, like in the police force. I always watch the CSI on TV with my granddad."

Student

"My sister's boyfriend's dad has his own company doing plumbing – he has like 2 Mercedes."

Student

"I'm just really interested in history and like to study it."

Student

"I have good A-levels results in sociology and my teacher talked to me about courses in sociology."

Student

"I really want to be a software engineer - I would be able to get a good job and have a good income."

Student

A new beginning as an adult

- Some students are anxious about having to make “adult decisions”
- Some students (maximisers) are anxious about making the wrong decision
- Some students feel there is pressure to have their life figured out
- Other students feel very relaxed about the process and decision making
- Others don't even consider HE to be an option for them
- Students and parents have a lot of expectations of what HE is like

“It's like, I'm still a kid, I mean we are children, but we have to make a grown-up decision (...) I'm not sure I have the experience to make that decision.”

Student

“I'm going to use an analogy' – have you ever been to a restaurant where there is a lot to choose from on a menu and then you decide on one thing, and then your friends get something else and you get this food envy.”

Student

“The schools (advisors and teachers) assume that you have your life figured out – which is not the case.”

Student

“I've never really thought about it - it's just not for me.”

Student (not considering HE)

Myths, unknowns & biased advice

- Finance - misunderstanding about student loans
- Is it worth it?
- HE is only for “certain people”
- Some students don’t know about apprenticeships
- Some advisors feel that information on apprenticeships is misleading
- Students are unsure about what happens if they change their mind
- Students and parents sometimes feel that schools and teachers are giving biased advice
- Parents may give biased advice based on their experience and knowledge

“Fees are just so crazy and you will spend so many years where you won’t be able to earn money - and you can end up being in debt for life.”

Parent

“I think if you are going to study something where you’ll have good prospects - then yes. But if you don’t know what you want and do a sort of generic degree - Holly wanted to do mental nursing and I just don’t know - you spend all that money and will it be worth it?”

Parent

“I was in an Uber and for some reason the driver started telling me his life story - he went to Uni and studied psychology and then couldn’t get a job after.”

Student (not considering HE)

Information seeking

- Most students and parents feel that there is a lot of information available
- Several students express that it's difficult to know where to look for certain information
- Generally students start with a Google search
- Most students visit university websites for course information
- Most students are aware of the potentially biased information in marketing material from universities
- Most students we spoke to go to 1-5 open days at universities - they want to know what it's like

"There is just a lot of information out there and once you show a bit of interest you'll be bombarded with more information."

Parent

"They [Education institutions] will just show you pictures from when the sun is out - basically it's marketing to make it attractive"

Student

"It's just very important to go there and see what it's like and if I fit in. [...] It can be tricky finding out about open days. "

Student

Emerging personas

Three different types of decision making behaviour

Pragmatiser

'Pragmatisers might be willing to modify their goals in response to constraints and limitations and usually settle on one or two 'safe' options that they would be happy to accept.'

Satisficer

'Satisficers make a decision or take action once their criteria are met.'

Maximiser

'Maximisers seek the maximum amount of information and try to evaluate all potential options.'

Three different ways of thinking about HE

Type 1

- Might not consider HE an option
- Myths will stop them
- Environment and influencers might not have high expectations for them
- Finding research difficult and overwhelming
- Not sure where to start
- Resigned to their situation

"I already dropped out of school so no one really expects me to do it"

Needs

- Inspiration and encouragement to start exploring opportunities
- Myth busting

Type 2

- Have a few criteria for their HE
- Will look for specific information relating to their criteria
- Optimistic about the future
- Independent
- Overwhelmed by information that they don't feel is relevant to them
- Might be quick to make conclusions

"I just kind of picked what I was interested in [History] and went for it.."

Needs

- Help navigation information and find what they are looking for
- Help making sense of information and encouragement to look more closely

Type 3

- Have a long list of criteria
- Very ambitious
- Nervous about the "big" decision
- Anxious about making the wrong decision
- Independent - but needs support / validation from influencers

"I pulled my hair out a lot, I thought about it a lot, I did a lot of research into looking through and comparing. At that point I was thinking, well how many boys are there? Or how many girls? "

Needs

- Help prioritising information and avoiding information overload
- Information that can help them overcome anxiety

Service blueprint

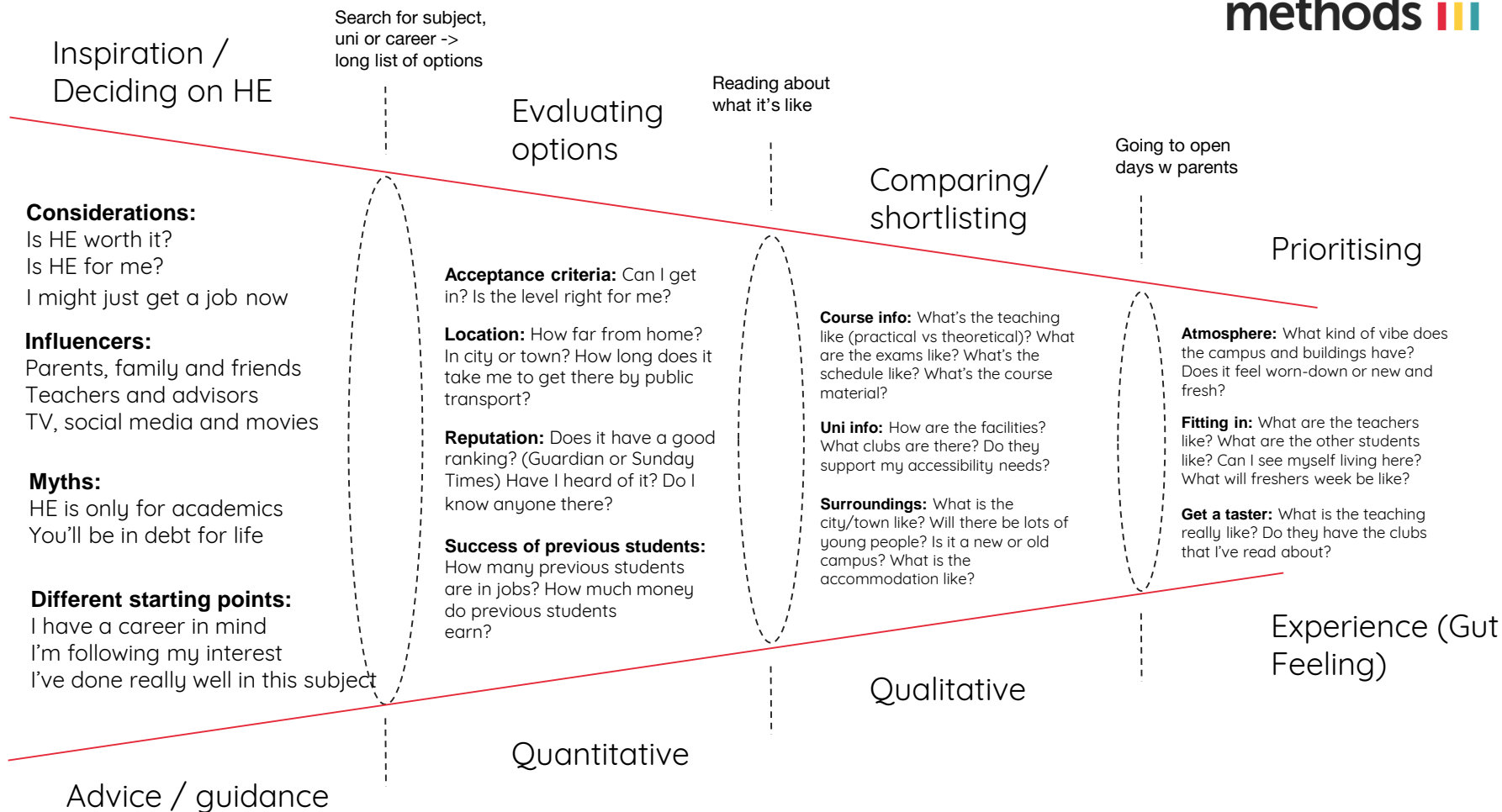


- The landscape is very very cluttered
- There are a lot of myths - keeping students from considering HE
- Students often don't know what they want and don't know where to start
- Generic doesn't work - students have different starting points
- Difficult for some users to understand (care about) quantitative data. Eg. entry info or "good" NSS score
- Contradictions across resources add to confusion

User needs and service opportunities

Decision making journey and user needs

methods 



Decision making journey and opportunities

methods 

Inspiration / Deciding on HE

Search for subject,
uni or career ->
long list of options

Evaluating options

Reading about
what it's like

Comparing/ shortlisting

Going to open
days w parents

Prioritising

Experience (Gut Feeling)

HMW promote non-monetary benefits of HE?
HMW help students understand potential benefits of HE?
HMW help students understand what uni is like?
HMW increase awareness of options?
HMW make students aware of breadth of opportunities?
HMW get broader messages about HE to the audience?
HMW improve awareness of different pathways to desired outcome?
HMW help young people weigh up all the costs?
HMW increase public understanding of HE finance?
HMW present value for money?
HMW identify/engage with children who have the potential to benefit from HE (but might not consider it)?
HMW help children who don't think HE is for them raise their aspiration?
HMW empower young people to find out about mental health or disability support?
HMW encourage students to challenge what parents advise / tell them?
HMW explain what they can do if they make a wrong decision?

HMW help prospective students navigate the information landscape?
HMW take users to what is important to them?
HMW make feedback loops (analytics) to improve enhancements?
HMW make use of automation/new tech?
HMW help students find trusted resources that help them?
HMW help students understand what a good outcome for them would be?
HMW guide people to relevant information?
HMW give users search results that are more relevant to them?
HMW allow both broad and specific referencing?
HMW present information for users with different starting points?
HMW we encourage users to start reflecting on what's important to them?
HMW give each student only the information they need at the right time?
HMW improve the search functionality to suit each person's needs?

HMW include qual data in context?
HMW give more descriptive information as well as data?
HMW present student experiences?
HMW show career paths for "soft skills"?
HMW present data on growing/shrinking careers?
HMW present data in a meaningful way – allowing for different preferences?
HMW simply present a complex set of data?
HMW modify language to make accessible to any type of user?
HMW better link together areas of tertiary education?
HMW approach entry information to make it more easily understandable?
HMW show how choices limit/create opportunities?
HMW present data without showing numbers?
HMW show survey results in a helpful way?
HMW build a solution which doesn't overload satifiers but gives maximisers what they need?
HMW signpost to other relevant resources so maximisers can maximise?

HMW give students and parents an overview of open days?
HMW help students and parents organise visits to open days?
HMW enable students and parents to make the most of open days?

Quantitative

Qualitative

Advice / guidance

Hypotheses

High-level alpha hypotheses

We have identified a number of open-ended high-level hypotheses to test a range of options in alpha:

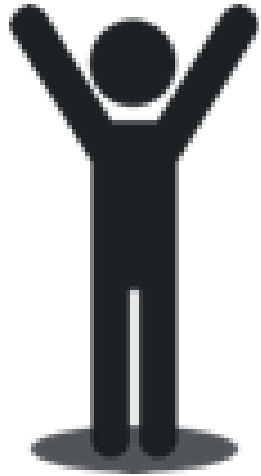
We believe that if we present higher education as something that is open to everyone, then we can engage and inspire people that wouldn't otherwise consider it.

We believe that if we can quickly pick up on a prospective student's starting point - in terms of point in the decision-making journey and level of prior knowledge - then we can provide appropriate information tailored to their situation.

We believe that if we ask prospective students questions about aims, interests and motivations in life then, through encouraging them to reflect on what is important to them, we can identify information which is salient for them and avoid data overload.



High-level alpha hypotheses continued



We believe that if we can help people to understand key aspects of higher education, through engaging advice and information, then we can dispel myths and encourage them to reconsider and weigh up the options available to them.

We believe that if we use cutting edge data visualisation techniques, then we can help all prospective students to engage with the data we publish and to take away important key messages.

We believe that if we help prospective students to understand more about higher education and the information that exists to help with their decision making, then we can create a dynamic seamless journey which allows them to make better use of other information resources, rather than us duplicating information.

Recommendations

Overall recommendation

User research identified a need for a resource that helps students navigate the information landscape, access the relevant information when they need it in the decision making journey, and enable all students to make sense of the information.

Continue to follow GDS service design principles with a view to testing how we can do this.

We will consider the appropriateness of this service being made available on Gov.UK.

We will also aim to pass the GDS Alpha Service Assessment at the end of the Alpha phase of work.

Benefits of moving to Alpha

- Gain an understanding of how to address some of the key user needs that have been identified in our Discovery user research
- Prototype and test ideas
- Provide us with further user testing insight and opportunities to shape our learnings

Progress to Alpha to test the priority opportunity areas around:



How can we best support people to make informed decisions about higher education?



How do we personalise the service based on what's important to people?



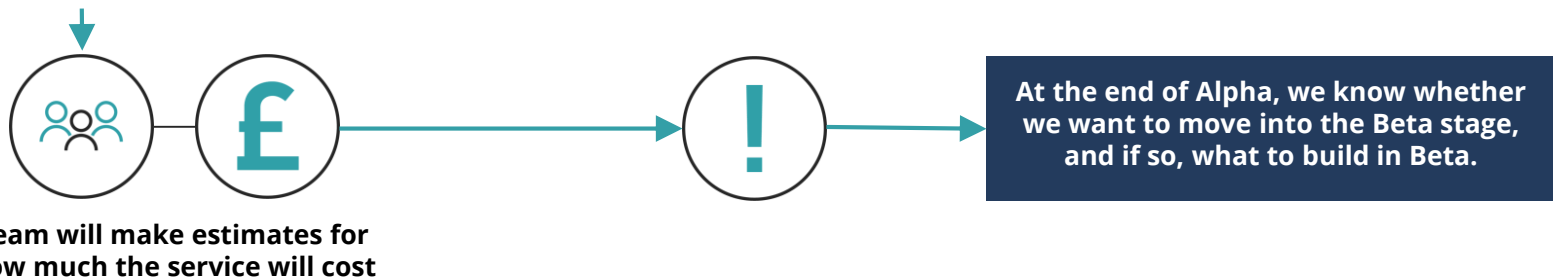
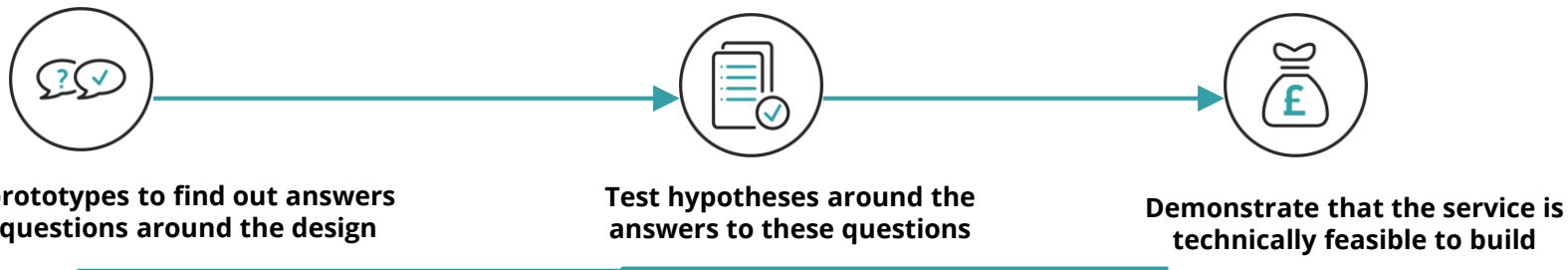
How do we present a range of information in a way that makes sense to all?

Alpha will test hypotheses for building a **decision-making support service** to help all prospective students understand what options are available and what HE is like when leaving school or in adulthood. This service would be aimed at prospective students, and at individuals who actively or not, have decided against higher education.

The work would cover 10 weeks of developing and testing options by a blended team from The Office for Students and a supplier.

Developing a new service

How we'll go about developing a new service



What does success look like and how will we measure it

During Alpha, we will build, test and iterate prototypes to understand what users want from the service.

These will be low-fidelity prototypes that will enable us to:

- Test options around the user experience
- Identify any problems with the design of the service and how we'll resolve them
- Determine the correct technical solution for the service and where it should be hosted
- Agree whether it is appropriate to move to the Beta phase

We will measure this by:

- Clarifying our understanding of the user journey
- Reaching agreement on whether the service needs to be housed on Gov.UK
- Understanding assisted digital and accessibility needs and how they should be addressed
- Finalising our view of how many people will use the service and how we will capture metrics
- Whether we achieve the aim of identifying the relevant data sources to use / reference and how we should use them or refer to them in the service

The team we will need

We will need the following team members for Alpha:

Product owner

(Oversight and making sure the service fits with organisation's needs)

Service manager

(Overall responsibility for the service)

Delivery manager

(Responsibility for successful delivery, removing obstacles, report and escalating issues where necessary)

User researcher

(Plan and carry out user research, communicate findings to the team)

Service designer

(Create end-to-end service and user experience)

Technical architect

(Define technical approach and make technical recommendations for Beta)

Content designer

(Create clear, easy-to-understand content for the service)

Front-end developer

(Work with the service designer to create low-fidelity Alpha prototypes)

We will also have access to an **OfS Data Scientist and Analytics team member** for the duration of the Alpha

Appendix

Landscape analysis

Landscape analysis

We have considered the wider landscape of current resources.

The “Information mapping study” (CFE, 2015) identifies 43 sources of online information in England about higher education, including Unistats. User research identified others, such as Which University and school subscription services e.g. unifrog. The OfS has carried out more recent mapping work which shows that the information landscape remains cluttered, with numerous online resources.

This ‘plurality’ of services, and the consensus across the research about information overload, suggests that Alpha would need to consider options that are significantly different from the current offerings, while also being aware of what is available for use in a new service.

Government supports a number of initiatives which provide information about various further education pathways and options for prospective students. There are opportunities to link with the National Careers Service and The Apprenticeship Service to name a few.

Ongoing user testing has found issues with the Unistats website

In addition to the wider landscape, there are some issues with Unistats that we have been made aware of, potentially to be addressed in Alpha. In summary, these include:

- Search functionality is complex and unreliable in its results.
- Search returns are long and difficult to navigate, and are not grouped by provider, which is off-putting.
- The interface looks cluttered due to the number of ways the information can be approached i.e. it is not clear where to start.
- Subject groupings are not clear and the subject list is not searchable.
- It is not clear what the data means to some students, such as continuation data, or differences in NSS scores.
- Some information, such as entry data, is not easy to understand.
- It can be difficult to filter results.

Key pointers from existing research review

Key pointers from existing research review

Paper	Date	Author	Key message
Moments of Choice: how young people make career decisions	2016	Hume, Heal, Behavioural Insights Team, Cabinet Office	Choice overload -> mental shortcuts, bias Advice centred around decision-making moments. However, 'moments of inspiration' as building understanding are equally important as moments of choice. Supporting informed decisions depends more on the how and when of data provision than the what, taking account of context and moment of inspiration / choice.
UK review of information about higher education: Information mapping study	2015	HEFC (now OfS & Research England), Diamond, Evans, Sheen, Birkin	Plurality of resources, overlap. Clearly label official data. Make info tailor made to student. Cover the experience of uni. Explore what roles the UK HE funding bodies should play in HE information provision. Employ more sophisticated ways of measuring and analysing students' use of HE student services and resources.
Student Information Landscape Mapping	n/k	DfE	"students are uncertain over the validity and reliability of online sources." "disadvantaged students consult fewer sources of information when making choices."
The financial concerns of students	2018	NEON & Portland Communications	Need clearer and better-targeted financial advice on the full implications of taking out a student loan, costs of tuition and living, intrinsic value of HE & value for money.

Key pointers from existing research review, cont.

Paper	Date	Author	Key message
Unistats user research	2016	fluent	Need more meaningful presentation of data and caution with language used.
Student information use and behaviour from lit. review of 182 articles	2014 & 2018	CFE research	<p>"Decision-making is process borne out of context. It is embedded in an individual's cultural and socioeconomic background, and the situated nature of their understanding of a piece of information."</p> <p>"Too much information can lead to cognitive overload, or an emotional inability to make satisfactory decisions."</p> <p>No 'one size fits all' info solution or fixed set of data categories. Flawed mental shortcuts often lead to a 'feels right' decision rather than rational, relying also on family, friends, uni visits.</p> <p>Need to simplify & engage to avoid info overload.</p> <p>Tailor info to individual - outcomes are inherently personal.</p>
Unistats LEO data research of prototype	2017 & 2018	fluent	Should be checked before building prototypes.

Key pointers from existing research review, cont.

Paper	Date	Author	Key message
Behavioural Approaches to Understanding Student Choice	2012	Diamond, A., Vorley, T., Roberts, J. & Jones, S. The Higher Education Academy/ National Union of Students (NUS)	<p>"Paradox of choice"= a growing range of options has the effect of increasing difficulty of d-m.</p> <ol style="list-style-type: none"> 1. Identify opportunities to engage parents and partners of pr. students. 2. Info sources should emphasise qualitative descriptions of the student experience. 3. Provide guidance to accompany info. 4. Adopt multi-mode communication strategies to engage pr. students. 5. Simplify application processes to ensure financial assistance is more influential in decisions. 6. Strive to provide maximum support to aid decisions of those from low socio-economic groups. 7. Encourage visits to HE institutions. 8. Raise awareness of key influences and common biases in decision-making.

Detailed user research findings

Mature students

- A new career
- A meaningful career
- I didn't know what I wanted
- Getting a qualification
- Practical vs theory
- Attached the area
- Schedule that allows time for working
- Established social life

Parents

- Some parents give a lot of support and guidance and want to be involved at every step in the process.
- Parents might be biased by their own experiences - and might influence their children to go down a certain route.
- Some parents will be very sceptical about their children's' choices - especially if they think that the course isn't worth it
- Parents that we spoke to all went to open days with their children

Users with assisted digital and accessibility needs

- What are the exams like?
- What is the schedule like?
- Can I get the support I need?
- Will there be more people like me?

Reasons for NOT choosing HE

- It's not worth the money and time: "Fees are just so crazy and you will spend so many years where you won't be able to earn money"
- You're not guaranteed a job: "I was in an Uber and for some reason the driver started telling me his life story – he went to Uni and studied psychology and then couldn't get a job after"
- You don't have to have a long education to be successful: "Richard Branson dropped out of high school – so you don't have to go to Uni to be successful. There are so many actors who really don't do anything"
- You don't have to have a long education to get a job and earn money: "My sister's boyfriend's dad has his own company doing plumbing – he has like 2 mercedes"
- It's just not for me: "I've never really thought about it - it's just not for me"
- I'm not expected to do it: "I already dropped out of school so no one really expects me to do it"

Unistats current data system

Unistats current data system

