

Venture - Revision.ai

Institution - University of Sussex

Social science discipline - Experimental Psychology

Sector - Education, IT & Communications

Route-to-market - Start-up

Reducing food waste in the catering sector



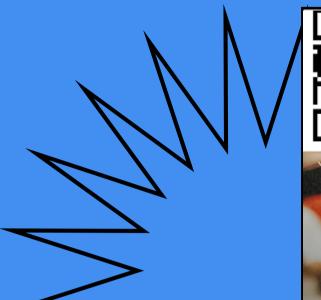
James Bowyer

Role - Founder

Degree - Experimental Psychology, University of Sussex, 2019

James Bowyer has a Masters in Experimental Psychology and credits the subjects covered in the degree such as memory, cognition and learning processes as key to the idea for the start-up. He also has a 1st in BSc Computer Science with Artificial Intelligence.





A brand-new educational app is improving student learning through interactive revision exercises



Exam season can cause 'analysis paralysis'; anxiety; loneliness and stress.

Traditional methods of revision, such as reading lecture slides, can be difficult for many to digest, regardless of how excellently they are prepared. Passive learning methods are less effective, leaving students retaining less information in preparation for tests.

Revision.ai is challenging the notion of traditional methods of learning, developing more interactive and modern methods which they believe will aid students in higher education. The start-up has developed a platform where students can upload presentation slides for free which are then turned into interactive games and quizzes, using gamification and AI, delivering engaging revision techniques. The platform contains features including matching students into video chats to study lectures they have in common, to encourage collaborative learning and improve the experience of education, outside of the classroom.

At its core, the app is inspired by cognitive and psychological research, aiming to improve memory retention and drawing upon the educational expertise of the founder, James Bowyer, in Experimental Psychology (University of Sussex, 2019). It contributes towards the United Nations Sustainable Development Goal 4, helping to deliver quality education and learning opportunities for all students. Combining his personal exam revision experiences, time spent tutoring, plus degrees in Computer Science and Experimental Psychology, James has created an educational platform that is socially and scientifically engineered to improve revision efficiency and enjoyment.

Based on psychological research into the reduction of test anxiety and the improvement of information retention, the app is user driven through the positive influence of social presence during online studying. He believes that 'the testing effect' (a key psychological finding) is crucial for his application which focuses on active recall exercises - such as quizzes - to improve students' long-term memory.

The app is fostering an online community with users from 81 universities. It delivers social impact by connecting students and encourages them to openly discuss their feelings about exam anxiety and academic isolation. Revision.ai is underpinned by psychology of learning research, with findings drawn from the literature directing the applications design. Examples include understanding which question types maximize learning (short answers over multiple-choice), identifying which learning environments reduce anxiety or afford beneficial collaborative learning, and what can improve wellbeing (reducing loneliness). As the platform develops, user experience testing is undertaken with student focus workshops. From this feedback, changes are made and additional features are added, ensuring that the app is meeting the needs of students.

In response to students raising the issue of loneliness during revision sessions, particularly felt during the lockdown restrictions caused by COVID-19, the start-up made an addition to the business and developed and launched www.uniintro.com. Uniintro is a student-only platform which randomly pairs students from the same university together and arranges one-to-one videocalls. The aim is to support students' health and wellbeing by enabling them to socialise online and form new friendships. The platform also offers written articles giving insightful tips on things like mindfulness and ways to improve their university experience. The platform has received a positive reception from students during coronavirus.

Social support hub for students: Revision.ai connects lonely students who might otherwise feel isolated, even on modules where they have no friends (matching by lectures slides), helping students avoid solitary studying.



Contribution towards UN SDG 4 by improving access to university learning: Revision.ai generates quiz exercises based on lecture slides, and is designed to make citation-based learning (a key feature of most university courses) less overwhelming and more accessible – the platform's drag and drop feature is more user-friendly than learning listed facts (e.g. author/title/year) and repeatedly searching for summaries.



Case study retention: currently, the app is most suited towards psychology and business university students who can benefit from the application's questions, which focus around defining concepts, theories and citation/case study interactive matching exercises.

The start-up journey

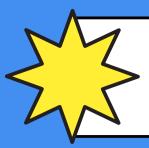
During his studies at the University of Sussex, James won funding from the Startup Sussex competition, enabling it to progress to the next stage of its development. Additionally, the Sussex Innovation Centre was crucial in providing invaluable knowledge about relevant opportunities outside of university. In debunking the common-held myths about graduate start-up prospects, and providing insights into relevant funds and accelerator programmes, the Sussex Innovation Centre suggested start-up development as a real graduate option for James. With this information, James applied to start-up 'accelerators' and continued on the Santander Emerging Entrepreneurs programme.

It's really hard to make more friends ... now I'm staying here for the holidays and other international students have left, I don't know many people here. Uniintro is the best alternative as I don't want to join any dating apps.

Hyejo Shin, Student

Key Learnings:-

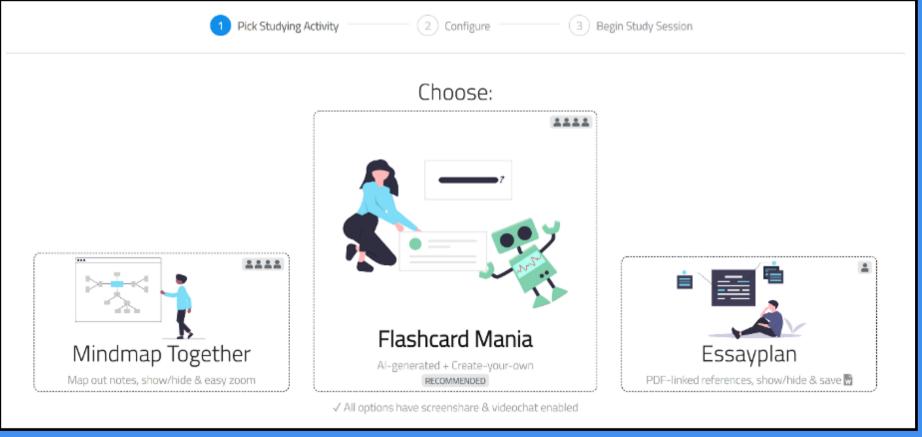
- Listen to many sources of information: explore how start-ups have failed, how friends, family, lecturers, strangers have coped in similar situations.
- ✦ Harness your intrinsic motivations: lots of people finish university thinking "I wish I'd done x, y, z..." - if your interests are pulling you to change courses, or apply for something that seems out of reach, go for it anyway.
- ◆ Be aware of the opportunities available to you: take advantage of university services and staff with expertise in your area of interest.
- Remain open-minded: just as this start-up arose from one student wondering why we dread studying slides, you can find inspiration in many places if you are openminded.



What's next for Revision.ai?

Despite the disarray of the recent exam season due to COVID, Revision.ai is still thriving. James notes the importance of his accelerator connections at Santander, which were crucial in maintaining confidence in his educational start-up when British exams were cancelled. Looking forward, the founder plans for the app to be accessible directly on university learning portals, to enable classmates to more easily connected, enabling this in February 2021.

Having provided Revision.ai as a code program to friends previously, James launched the app Minimum Viable Product (MVP) in December 2019, in time for the January exams in 2020. James hopes to see students reap the rewards of his testing effect application across the full, forthcoming academic year. With a clinical psychology intern on board, Revision.ai is growing in scope by developing visual components (such as diagram labelling exercises) whose educational benefits are, true to brand, based on psychological studies.



A sneak peek at the collaborative upcoming exercises on Revision.ai