



DigiEduHack Solution

Berlin - #SemesterHack 2.0 (in German & English)

Challenge: Berlin - #SemesterHack 2.0 (in German & English) Challenge 2020

Conducting Online Research - A Fun Workbook

Making online research #easy and #fun (during a pandemic...& after)

Within all of us is a curious mind: a scientist. Particularly during a pandemic we have no choice but to rely on online research. This workbook will (hopefully) help you tackle the challenge of conducting your research online - and while we are at it, make it fun. Everyone can find fun in research.

Team: Online Research Squad (a.k.a. the ones responsible for all the fun while researching)

Team members

Helena Lorena Winiger (Freie Universität, Berlin), Dr Meikel Soliman (Leuphana University, Lüneburg), Nadine Krüger (SRH University Heidelberg, Heidelberg), Tina Marie Monelyon (Mainz University of Applied Sciences, Mainz)

Members roles and background

1. Dr. Meikel Soliman, PostDoc - Leuphana University, Lüneburg: The most experienced researcher among us, who - we are fully convinced after seeing his workbook design suggestions - is definitely also a creative in disguise
2. Tina Marie Monelyon, Research Associate - Mainz University of Applied Sciences, Mainz: The person with the plan in our team who obsessively structured our Miro board and never tired to throw in digital education bits and pieces here and there
3. Helena Lorena Winiger, Philosophy Student (M.A.) - Freie Universität, Berlin: The "reasoning voice" majoring in philosophy who ensured we keep a balance when thinking

about discipline-specific research needs

4. Nadine Krüger, International Business Student (B.A.) - SRH University Heidelberg, Heidelberg: The team member closest to our target group and thus key in ensuring user experience

Contact details

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Solution Details

Solution description

We may not all want to win a Nobel Prize. But within all of us is a curious mind, that sometimes wants to get to the bottom of things: a scientist. Admit it, in your childhood, your curiosity knew no boundaries. In some rare instances, we are not really scientists - sometimes other people (usually Professors) make us do research. To make things worse, often these are not real-life experiments, but online, particularly during a pandemic (and other times as well)...how fun. Social distancing teaching does enhance the funny...where is everyone?

This workbook is here and will (hopefully) help you tackle the challenge of conducting your research online - and while we are at it, make it fun. Specifically, you will understand how to pose a research questions that can be conducted online, learn ways to find the correct literature, design a groundbreaking online research design and implement it using an online software tool.

You will also dive into how to structure your research project, whether it is for your bachelor's- or master's thesis or just an ordinary empirical work your Professor forced you to do. You will also dive into challenges and obstacles that online research provides and reflect on how you will overcome these to win that Nobel Prize...or get that freaking bachelor's or master's degree...how difficult can it be? With this workbook not that difficult. We promise.

We hope that this workbook will allow you to revisit your childhood scientist and that you find this workbook useful in your endeavor to win that Noel Prize over and over again.

On a serious note: Not everyone will get a Nobel prize, but everyone can find the fun in conducting online research and maybe, just maybe, want to become a scientist. Let the games begin.

Our workbook follows a typical research process and each chapter has the following structure:

1. Knowledge - We provide the context and relevant defintions
2. Transfer - Students have to get to work and apply the provided knowledge to their specific research project
3. Reflection - Students are encouraged to examine their work in progress based on templates
4. Checklist and supplementary materials - To ensure knowledge retention and provide

additional information

The workbook will be available in multiple formats, namely an application, a PDF version (which can be filled online or printed out and filled by hand) and a digital homepage (www.makingonlineresearchfun.de), to ensure all learners have access independent of their internet and gadget infrastructure.

A first prototype of the workbook (in PDF format) with one chapter fully designed and laid out is attached below. Please also check out our video walk-through (above or shared via link below).

Solution context

Learners, specifically first-year students, bachelor and master students, are facing great challenges due to the Corona pandemic. They are forced to take their research online as an emergency response, often without receiving extensive guidance.

In order to bridge the online and offline research world, the workbook can be utilized in different digital formats as well as in hardcopy format (e.g. with mobile-friendly QR-codes for supplementary materials). Students can either proactively utilize the workbook on their own or lecturers, who are in the process of adjusting to the often challenging pedagogical situation, can suggest the workbook to their students as an additional resource.

Solution target group

The main target group for the workbook are students conducting their research online for the first time or with little online research experience. This concerns nearly every university in the world expecting their students to conduct empirical research. Furthermore, lecturers can pass on the workbook to their students as an additional resource outside of class.

Solution impact

The workbook has the potential to immediately foster students' online research competence, even without additional guidance by lecturers. Additionally, it is a handy tool for lecturers to convey the benefits and caveats of online research in a fun and engaging way. As part of our team consists of lecturers, we are ourselves able to pass it on to our students immediately.

Through our website we are able to monitor the number of downloads. In the longer run, an additional engagement platform connecting different students using the workbook and encouraging them to participate in peer feedback (e.g. regarding their research questions) is thinkable.

Solution tweet text

You need to conduct Online Research during the pandemic and have no clue how? Use our fun workbook for knowledge retention, guidance and self-reflection #becomeascientist #makingonlineresearchfun #nobelprizenext

Solution innovativeness

Of course, workbooks are not a new invention. They are in fact fairly common at the school level, not so much at the university level though. And quite naturally, there are several text books on online

research and how to conduct online research available already.

But during challenging times, such as the current Covid-19 pandemic, it's the rather simple yet effective solutions that can really make a difference. Many students are currently faced with multiple challenges ranging from additional course workload due to having to write more assignments instead of exams, additional stressors due to limited "work space" at home and potentially even financial strains. So, quite naturally, motivation to learn can be lower than usual. And that's why our workbook is to some degree "unconventional" and designed to convey researching online in a fun yet scientifically sound manner.

Solution transferability

The workbook, which as a first prototype was developed in English, can be easily translated into other languages and can thus become a valuable additional resource for young researchers around the globe. The structure and approach have been kept general by design in order to ensure that students can gain value from content and engagement with the workbook independent of their field of study or research or their university. In the current first prototype, the workbook focuses mainly on quantitative research methods. An adapted version or even a separate edition for qualitative research methods can be easily developed. Based on the flexible concept of QR-codes, discipline-specific additional inputs can be easily added as well.

Due to the digital format of the workbook, it can easily be adapted, updated and re-written at any time. All that is required, is uploading the updated version on the website as well as making changes to the app.

Solution sustainability

Our idea is sustainable because the workbook can be applied multiple times. It guides students and researchers through their research projects. Furthermore, we will develop an online platform as well as an app to ensure widespread usage of the workbook in line with infrastructure and user preferences.

As online research in general gains in relevance, this workbook will provide students with a better understanding of a topic relevant for the future.

In terms of implementation, we have developed the following plan:

- a. Completing prototype (completing other chapters of the workbook) - from December 2020
- b. Concept test with students of different disciplines and making necessary adaptations - February 2021
- c. Requesting feedback from fellow lecturers across Germany (approx. 25) - March 2021
- d. Setting up website and app for digital distribution - March 2021
- e. Marketing workbook by spreading the word and ensuring the workbook is discoverable (e.g. in OER databases such as OER Portal Lower Saxony - <https://www.oernds.de/oer/>)
- f. Summer semester 2021: Goal achieved! The workbook is widely used by individual students and at institutions across Germany and is ready for global roll-out

Solution team work

Four researchers with varying research experience levels, from different cities, higher education institutes, disciplines and representing the student as well as the lecturer perspective, united by a huge passion for science and research worked together to create one solution: a workbook. We want to give researchers guidance who dive into online research (not only) for the first fun time.

We jointly brainstormed and discussed, shared experiences from our respective fields and educational contexts and after jointly reviewing inspiring workbook examples we found online, developed a concept for our overall workbook structure and the chapter-wise elements (e.g. checklists, engagement activities) and filled it with life. Lastly, we developed a "user story" for Marie, a first year student. We jointly worked our way through the workbook from her perspective and imagined what she might fill in as part of the exercises. But don't take our word for it. Check out our workbook prototype below.

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