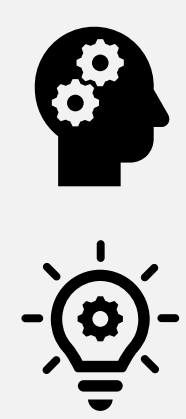


1. Introduction

The research project “Study individualization through digital, data-based assistants” (SIDDATA), in which a tool is developed, has the overall goal of supporting students in defining and pursuing individual educational goals. For this purpose, previously unlinked data are integrated within a digital study assistant.



- Target dimensions are
- furthering the ability for self-regulated study
 - self-monitoring
 - promoting study individualization.

To explicate SIDDATA, digital workshops, based on the Design Thinking approach [1], were conducted between June and July 2020 at three university locations in Germany.

This study

1. presents the concept and methodology of the workshops and
2. shows the role of Personas in the Design Thinking process.

2. Method Overview

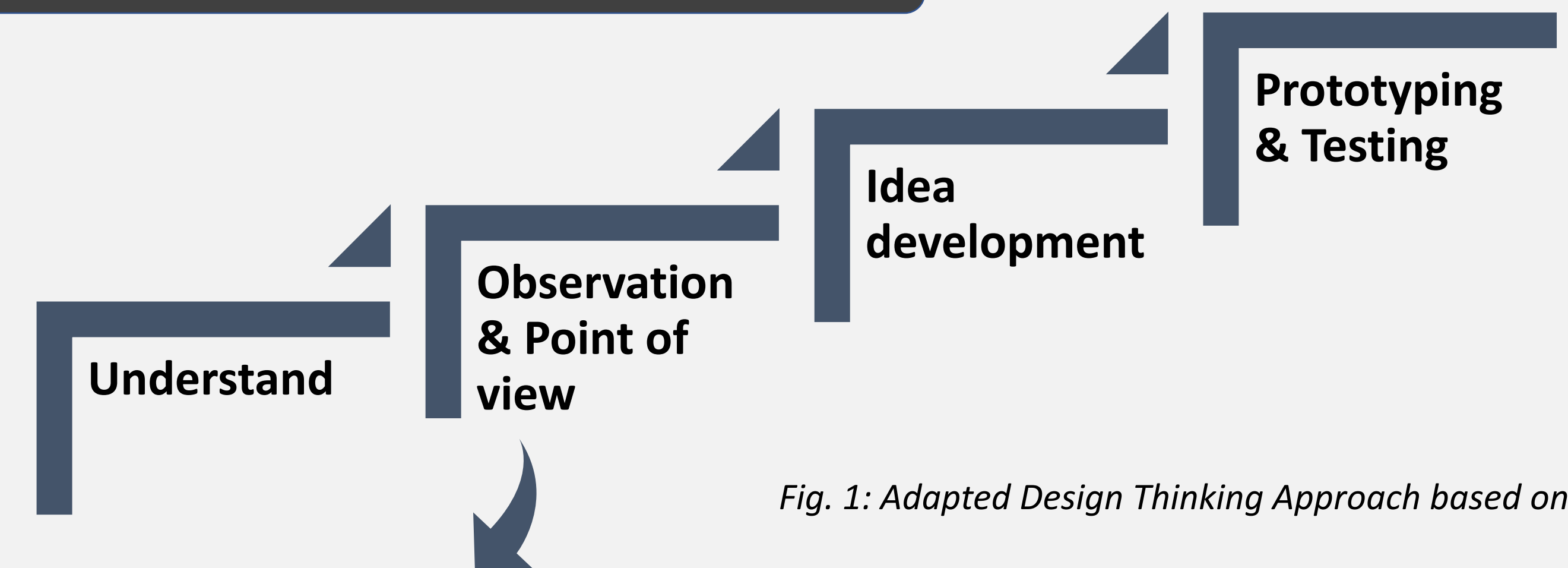


Fig. 1: Adapted Design Thinking Approach based on [1]

Development of the Persona

Realized along the Student Life Cycle (SLC) and differentiated five characters:



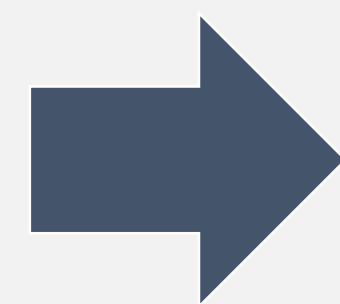
- a student in the early studying phase, first-generation student
- a student in transition from bachelor to master or job employment
- a student successfully engaged in the middle of her/his study with interest in a stay abroad
- incoming guest student
- a student with a second attempt in higher education: she/he has changed subject and university

3. Results and Discussion

	Number of Participants	Female / Male	BA / MA	Institution
Workshop I	6	5 / 1	3 / 3	University of Hannover
Workshop II	5	4 / 1	4 / 1	University of Göttingen, University of Hannover
Workshop III	7	1/6	3 / 4	University of Bremen, University of Osnabrück, University of Applied Science Bremerhaven
Workshop IV	6	4 / 2	3 / 3	University of Osnabrück

Usefulness of the Persona

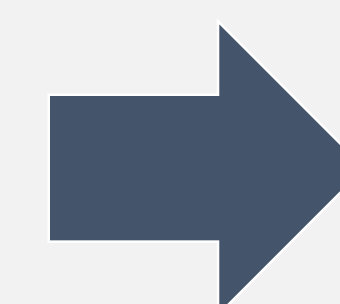
Before introducing the persona, the students mainly mentioned a demand for apps for a better study organization, for example:



Proposals focused primarily on how to cope with the organizational requirements, for instance:

- A spreadsheet that shows modules to complete, requirements and due date.
- A calendar with reminder functions e.g. for exam registration to better organize the course of the study.
- A tracking function of students' grades average.

After introducing the persona, completely different ideas were developed. Aspects of study organization receded into the background and instead, further crucial issues have been addressed:



- **Learning support: organization and social integration:** within the first workshop, supporting the learning process and exam preparation was one of the central cores of ideas. The app should then help the students e.g. to keep the learning stints they set themselves. The aspect of social integration also addresses the learning process. It includes suggestions such as a tool for setting up learning groups and finding learning partners.
- **Support during the transition:** The focus of the second workshop was on supporting the transition phase from BA / MA to the labour market or from bachelor to master. The challenge of starting a career should be overcome by e.g. providing job descriptions through alumni, with contact opportunities and recommendations for internships. Personalized recommendations for Masters or specializations were also suggested.
- **Support abroad:** The third workshop was very heterogeneous in terms of ideas. What was new, however, was that the topic of a stay abroad had been chosen for the first time and with clear emphasis. The topic was accompanied by the topic of a career change, which had already been the main focus in workshop II.
- **Support personal interests:** In the last workshop many ideas revolved around the topic of personal interests. The app should help to find out students' interests better and to obtain recommendations for lectures, classes (maybe also at other universities), based on these interests.

4. Conclusion

The workshops have shown that with the introduction of Personas, workshop participants find it easier “taking the role of the others” [2] and to develop ideas outside their own needs. In this respect, Personas have a double effect: they create distance to oneself and they create empathy for others. The key to the successful creation of Personas is that they have to be concrete but also have to open possibilities for one's imagination. All participants felt they could empathize well and imagine real people in front of them immediately. Nevertheless, there was a certain degree of indeterminacy that left room for interpretation and stimulated the creative process. Also, the workshops showed that with good preparation even a highly interactive format like Design Thinking can be done virtually.

5. References

- [1] C. Meinel, L. Leifer, H. Plattner, Design Thinking. Understand – Improve – Apply, Berlin, Heidelberg: Springer, 2010.
 [2] G.H. Mead, Mind, Self, and Society: The Definitive Edition, edited by Charles W. Morris, annotated by Daniel R. Huebner and Hans Joas, Chicago: University of Chicago Press, 2015.

6. Acknowledgement & Contact Information

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