



Project Report **zusammen.sammeln**

Team

- Meike Marie Amma
- Eva Maria Biehl
- Julian Sebastian Birkmaier
- Beatrice Boekstegers
- Stefan Büchner
- Marlies Gwendolyn Köpke
- Anna Schmidt
- Fabian Schmidt
- Johannes Peter Steidl
- Florian Surek
- Stefan Tippelt
- Michael Vetter

Tutor

- Johannes Feldmaier
- Jeremias Heinrich
- Andreas Volmering
- Lena Weber

Mentor

- Dr. Frank Frieß
- Prof. Dr. Alwine Mohnen
- Dr. Michael Schermann



zusammen.sammeln

Even with the elimination of tuition fees in winter semester 2013/14, students still have to spend a huge amount of money for living, especially in and around Munich. As a consequence, only few have enough financial resources to support charities. When the umbrella term for the 2014/15 projects of the TUM: Junge Akademie, „Campus of the future“, was released, the project group *zusammen.sammeln* was formed to change this situation.

The aim was to design, implement and evaluate a donation system for the Technical University Munich, which guarantees a maximum of accessibility and affordability for students. To this end, the concept of social micro-crowdfunding was chosen. The core idea was: If everyone contributes a little every once in a while, a lot will accumulate to help others in need. In the course of the past year, two types of pilot projects were designed and implemented, conscientiously considering scientific methods and standards during the process. After getting to know the preferences and dislikes of the target group by conducting a representative survey, two separate systems were designed.

First, **#Pfandevent2015**, consisting of a two-week campaign realized at the City Centre Campus and the Campus in Freising (WZW) of the TUM, gave students and employees the opportunity to donate their „Pfand“ by throwing their deposit bottles in designated donation-bins to support the Lebenshilfe Werkstatt GmbH München. The distinctively shaped and coloured blue donation-bins were handcrafted in a workshop for metal works and welding, which was taken by *zusammen.sammeln*'s team. They are practical containers for donated deposit bottles as well as stylish markers to establish the *zusammen.sammeln* brand on campus.

Secondly, **#Spendenessen2015** was implemented in cooperation with the Studentenwerk München (STWM) as the first charity meal ever to be conducted in Studentenwerk's facilities in Germany. While students, employees and guests had the chance to choose between a variety of meals next to the donation meal, an astonishing 6.000 of them decided to go for the „Spenden-Currywurst“ and more than 2000 „Spenden-Joghurts“ were sold in order to support the Studentenhilfe München e.V..

Countless positive reactions and interactions by and with students and employees during and after the pilot projects strengthened the belief of *zusammen.sammeln* to be on the right track. The overwhelming support and appreciation by the target group solidified the belief that a social campus did not have to be invented - it is already reality. The ability to activate the huge sleeping potential among TUM members and to provide them with attractive social projects in their daily academic lives is going to be a keystone for the future social capacities of the TUM.

Besides the positive impact on the supported people's lives by *zusammen.sammeln*'s social crowdfunding projects, these can also contribute to the social characteristics of the TUM. As a pledge to its alma mater, these projects are going to affect daily life at TUM in two distinct directions: Inwards as a solidification of the TUMs ever increasing school-spirit and self-understanding as a responsible and meaningful institution. Outwards as a strengthening moment, tightening the bond between the TUM and its hometown of Munich.

In the future, when you walk around the campus and see one of the donation-bins or the advertisement for the next donation meal, go ahead and participate. It is not much for an individual, but together we can achieve great things. Together, we are strong. Together, we can make a change!

Abstract

The giving behavior of young people differs from the average donor. Our goal was to analyze the donations of students and develop means of “social crowdfunding” tailored to their needs. After scientific investigation we implemented two projects to test micro-crowdfunding at TUM. Both tools achieved great acceptance and successfully integrated micro-donations into the students' daily routines.

1. Background

Donations play an important role in modern society: They are not only a sign of sympathy and compassion with the poor, but show helpfulness, solidarity and support for the ones in need. Through their care in selecting causes to donate to, people can assume responsibility and express their will to shape society (Priller 2009). Most typical are monetary and in-kind donations, but also the donation of time, blood or organs should not be forgotten. The common factor in all forms of donation is that the donor gives something of value without expecting anything in return.

Statistics show that the total volume of donations has been steadily increasing in Germany, having reached a new all-time record of 4.96 billion Euro in 2014 (Spendenrat 2015). Yet, there is a huge imbalance between the contributions of the different age groups in the German population. As chart 1 shows, people at the age of 60 or more account for 60% of the total contributions while only representing 31% of the population. In contrast to this, people younger than 40 account for 35% of the population, but only contribute 9% to the total donation volume.

This disparity cannot be explained only by the unequal distribution of income and wealth: Average income peaks when people are in their 30s and 40s (Bundesbank 2013) and wealth peaks for people in their mid-50s (Sachverstaendigenrat 2013). It is understandable that younger citizens, especially students, are not able to donate as much money as older age groups with a mostly assured income. Still, there is a potential to raise more money for charitable causes from this age group than at present. It should be emphasized that people with an academic background and therefore former students are particularly expected to assume social responsibility in German society.

The challenge is to motivate young people to make donations despite their limited financial assets. Social crowdfunding appears to be an attractive way to better leverage their donation potential. In the context of this paper, social crowdfunding describes fundraising for social projects from a large group of people by means of easily feasible micro-donations: Rather than aiming at high single donations, the potential is seen in a small contribution from everyone.

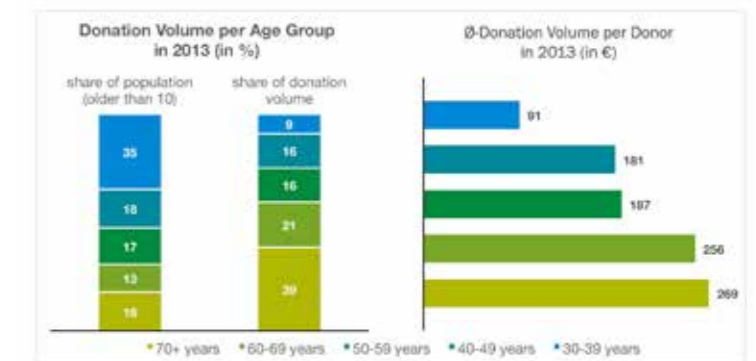


Chart 1: Donation volume per age group and average donations [Spendenrat 2015]

2. Goals and Methods

The main goal of our project is the development and implementation of social crowdfunding-tools specifically tailored to the needs of students. As aforementioned, the tools focus on micro-donations of a large number of students due to the limited average financial assets of our peer group. Our project purposely does not consider voluntary work (donation of time), as the latter has been subject to „TUM Social,“ a previous project within the TUM: Junge Akademie. Our project's main goal is divided into several sub-goals which are listed in Table 1 and will be explained in the following. The table also lists the methods that were applied to fulfill the respective goals.

First, it was crucial to understand why and how people generally donate for charitable purposes. As scientific and social institutions have comprehensively analyzed the giving behavior in Germany and other countries, a review of the relevant literature and the publicly available statistical data was conducted.

Goals	Methods
1 Find out why and how people donate	Literature review on giving behavior
2 Develop social crowdfunding-concepts by means of micro-donations aiming at increasing the donation volume among students	Brainstorming and other creativity methods, review of existing projects
3 Analyze the giving behavior, principal motivation and potential for donations among students	Survey: - Apply scientific methods how to develop and conduct a survey - Review existing surveys analyzing giving behavior, motivation and potentials of donors - Present social crowdfunding-concepts, ask for acceptance and motivating factors
Analyze the difference between the donation behavior of students and the whole population.	
Receive feedback on developed social crowdfunding-concepts	
4 Evaluate the effectiveness of the developed social crowdfunding-concepts	Pilot projects: - Implement concepts as pilot projects with collaborative partners - Support projects with (social) media campaign - Observe the perception of the students and conduct interviews following a questionnaire - Evaluate the success of the projects on a monetary basis
Identify the most important factors for the success of social crowdfunding among students	
Increase the awareness of social institutions/projects at the university	
5 Establish successful pilot projects in the long run	Discuss the results of the pilot projects with collaborative partners, define steps for a long-term implementation

Table 1: Goals and Methods

Simultaneously, we developed social crowdfunding-concepts by means of brainstorming and other creativity techniques. We also conducted a review of existing projects collecting micro-donations for social purposes. The concept development focused on ideas being feasible in the university environment of our peer group. Next, we conducted a survey concentrating on two core goals: On the one hand, we wanted to better understand the giving behavior, motivation and potential to donate of the students. On the other hand, we asked the students for feedback on the proposed crowdfunding-projects, including motivating factors. The development, execution and analysis of the survey followed scientific and statistical methodologies..

In order to prove the effectiveness of the developed concepts, we implemented them as pilot projects with collaborative partners. The pilot implementations included a promotion campaign focusing on the utilization of social media. During the pilot projects, we carefully observed the perception of the students and conducted interviews with them aimed at the identification of success factors for the projects. Eventually, we performed a monetary evaluation of the pilot implementations.

Finally, we discussed the pilot projects with our partners and defined steps for a long-term implementation. These steps are necessary for a sustainable implementation of the projects in the long run.

3. Outcome and Discussion

3.1. Literature review on donation behavior

Recent studies about the donation behavior of the German population show that about 79% of all donations aim at humanitarian aid. As chart 2 depicts, child and youth support as well as religion/church are the most common causes that people donate for. Further important causes are those to do with diseases and disability as well as disaster relief. Non-humanitarian aid, which includes culture and heritage protection, environment and nature conservation, animal protection, as well as aid for sports, amounts up to 21% of the total donation volume. The graph also illustrates that bank transfers, online transfers and direct debiting dominate the donation methods. Direct deposits and collections are less common.

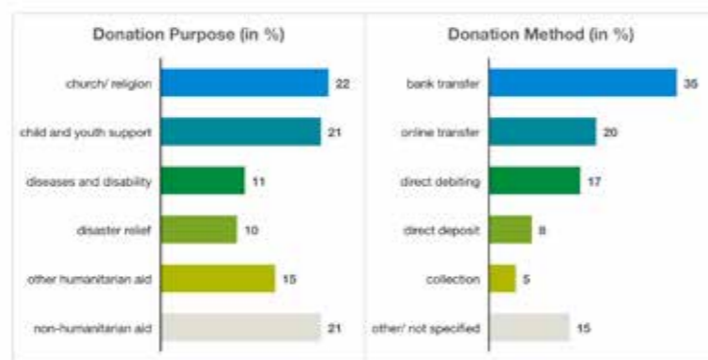


Chart 2: General giving behavior in Germany 2014 [Spendenrat 2014, Spendenrat 2015]

3.2. Concept development

Two different concepts for a social crowdfunding-system were developed in the scope of our project: a deposit bottle donation system as well a charitable dish in university canteens.

The deposit bottle donation system allows students to donate their returnable bottles by throwing them into two boxes particularly designed for this purpose. As returnable bottles are worth 8, 15 or 25 Euro cents in Germany, they represent a good medium for micro-donations. Similar projects have been implemented at other

German universities and also in supermarket chains. Early talks with responsible persons of TUM confirmed the general feasibility of a deposit bottle donation system at TUM.

Besides the deposit bottle donation system, the vision of an automated donation system utilizing the student chip card, which is the dominant payment method in Munich universities, was developed. The chip card has to be regularly recharged and is based on RFID technology. It allows rapid transactions of virtual money at almost any payment counter of canteens, cafeterias, coffee shops etc. Based on this payment principle, the concept of automated very small donations (e.g. 1% of payment, 1 cent) with every transaction was proposed. The Studentenwerk München (STWM) organizes the student chip cards and the payment system. IT experts from the STWM assessed the technical effort for the implementation of the automated payment with the student card as too high.

That is why the idea of a charitable dish was developed as a more feasible alternative. The concept proposes that students can choose to pay a little extra by purchasing a certain dish on some days during the semester. The fixed donation sum is automatically added to the dish price and paid by the students and all other employees with their chip cards, which makes the system very convenient. The feasibility of the concept was confirmed by the responsible persons of the STWM, among them managing director Dr. Wurzer-Faßnacht.

3.3. Survey on giving behavior of students and concept approval

Following the literature review and the concept development, the survey analyzing the giving behavior, motivation and potential of students to donate was conducted. The survey's goal was to unveil the difference between the donation behavior of students and the whole population. Additionally, the acceptance of the two social crowdfunding-concepts was tested, in order to use the insights obtained from these questions in the later pilot projects. In total, 23 nominal-, Likert- and ratio-scaled questions and four open questions in four categories were asked (the number in brackets indicates the number of questions per category):

- Current giving behavior, donation purposes (11)
- Motivation to donate (2)
- Particular questions on developed social crowdfunding-projects (8)
- General information of the respondents (6)



Chart 3: Sample composition (n = 759)

All students and employees of TUM were selected as the total population to be investigated. From this population, a sample was drawn by arbitrary selection. We published requests for our survey via social media and mailing lists. In total, n = 759 responses were obtained. Chart 3 shows that the majority of the respondents of the survey were students, more than half of them within the age group of 21-24 years. Interestingly, the number of male and female respondents was approximately the same, although the ratio between female and male students at TUM is 1:2. Chart 2 also demonstrates the low income of our target group. The available income, excluding accommodation, of more than 60% of the respondents is less than or equal to 400 €. By contrast, the share of incomes higher than 700 € is only 10.2% and employees account for a large proportion of this figure.

The results from the survey depicted in chart 4 indicate that there are only minor differences between students and the average donor when it comes to the choice of the donation purpose: Disaster relief as well as child and youth support were selected most often by the respondents. The motivation to donate for religious reasons was not surveyed, as religious donation purposes are mostly relevant for members of the church and therefore do not apply to

every student. In general, the support for humanitarian aid was high which is similar to the analyses of the Spendenrat (Spendenrat 2014, Spendenrat 2015). As child and youth support was the option named secondly most often, the choice of the Studentenhilfe München e.V. as one of the recipients of the pilot projects (see 3.4) is supported by the survey. The Lebenshilfe Werkstatt was selected as the other recipient of the donations of the pilot projects (see 3.4), based on the finding that 35% of the students would donate for disabled and sick people.

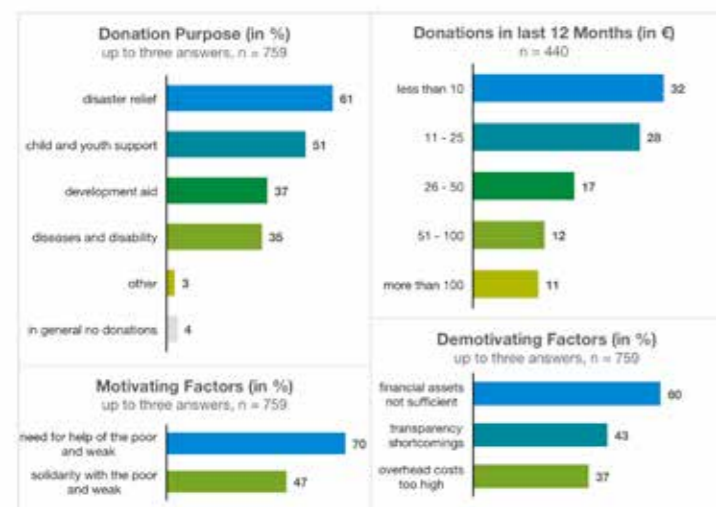


Chart 4: Survey Results I

Sixty percent of the respondents stated that they do not have enough money to make large donations. Sixty percent of donations being smaller than 25 € demonstrates the need for the option of micro-donations. Because wire transfers are not feasible for micro-donations as they are associated with comparatively large administrative efforts, other ways of collecting the micro-donations are supported by the survey.

Chart 5 shows that a donation based on a fixed amount per purchase in the canteens as well as a donation of deposit bot-

tles achieved great consensus among the students. In both cases, 71% of the students stated that they would participate in the respective donation system. In general, the results confirm that social crowdfunding based on micro-donations is a suitable approach to increase the giving behavior of students.

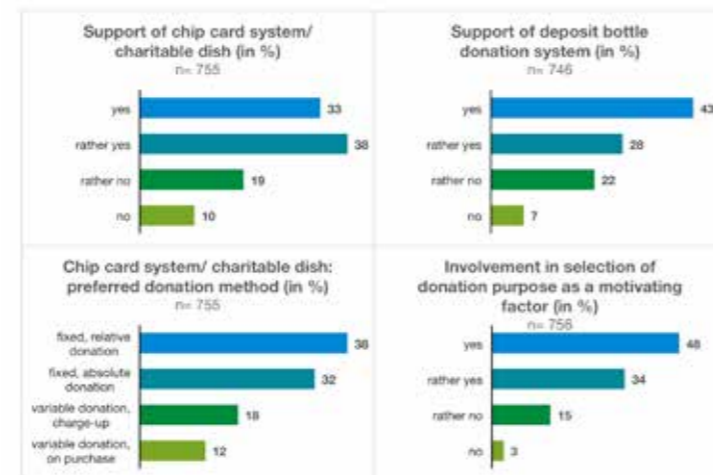


Chart 5: Survey Results II

3.4. Scope of pilot implementation

For the pilot project of the deposit bottle donation system, suitable containers were built and placed at two highly frequented places on the university's main campus: one close to the entrance of the main canteen and the other one close to the main lecture hall. The selection of the spots was based on the expected number of students passing by with deposit bottles: Both places are close to university canteens, where students consume lots of drinks. All necessary building directives, most importantly the fire safety regulations, have been met.

The pilot phase lasted ten days in May 2015 and therefore took place during the lecture period of the summer term. The "Lebenshilfe-Werkstatt," a non-profit organization in Munich, which supports

the integration and participation of disabled people in working life, was chosen as the recipient of the donations. The selection was based on the survey results, which indicated high acceptance of a charitable institution like the Lebenshilfe-Werkstatt.

The evaluation of the pilot phase of the deposit bottle donation system was performed by analyzing the number of bottles donated per day. The donations were counted three times daily. Additionally, personal interviews were conducted to analyze the project's perception among the students. The pilot project aimed at testing the acceptance and feasibility of the system, spotting necessary adjustments for a long-term establishment and forecasting the amount of donations in case of a university-wide system. A second pilot phase of the deposit bottle donation system at the campus "Weihenstephan" of TUM in June was used as a reference for comparison with the first test phase.

The pilot project for the charity dish was implemented in cooperation with the STWM, the operator of all canteens and cafeterias of all major universities in Munich. The "currywurst" was selected as the main dish since it is the most popular food in the canteens of the STWM. Moreover, the strawberry yoghurt dessert was chosen as an alternative for the students, also to provide an option for vegetarians. The cooperation with the STWM ensured that both dishes were available in all STWM canteens and cafeterias.

The "Studentenhilfe München e.V." was selected as the recipient of the donations raised with the charitable dish pilot project. The Studentenhilfe is a charitable organization that helps students in need and its support eventually aims at equal opportunities for all students. The choice of the Studentenhilfe was made for two reasons: First, we wanted to offer another donation purpose than that of the deposit bottle donating system in order to evaluate the different levels of acceptance by the students. Second, the STWM is one of the assisting institutions of the Studentenhilfe and was strongly in favor of their support.

The effectiveness of the charity dish was assessed by a monetary evaluation of the donations made as well as a quantitative comparison of the number of dishes sold relative to the last times

the same dishes were sold. Factors that influence the demand for university meals like weather, day of the week and season were considered in the analysis. A qualitative evaluation was conducted by interviewing customers as well as STWM employees in order to collect more information on the acceptance and feasibility of the system.

Both projects were supported by a social media campaign as well as an on-site campaign with flyers and billboard advertisement. Additionally, advertisements in different newspapers, magazines, a radio station and a cinema were used to raise awareness of our undertaking. The impact of the campaigns was studied based on the individual feedback of the students participating in the pilot projects.

In the final stage of the project, options for a long term implementation of the suggested systems were evaluated by interviewing the project team's cooperating partners: The STWM, the Lebenshilfe-Werkstatt and the university administration. The most important factors for success were aggregated and necessary adjustments elaborated.

3.5. Evaluation of pilot projects

The two pilot projects confirm the benefit and acceptance of the social crowdfunding approaches among the students: In the case of the deposit bottle donation system, 720 bottles were donated within 10 days as well as another 330 bottles in Weihenstephan, which amounts to a total donation volume of 180 €. The boxes proved to be feasible: A negligible number of glass bottles were broken and the containers were not abused as trash cans. The choice of the place of installation plays an important role: The number of bottles donated was significantly higher in case of the main lecture hall (559) when compared to the main canteen (161).

We received a lot of positive feedback about the usefulness of a deposit bottle donation system and were overwhelmed by students asking about the absence of the donation boxes once we had terminated the project. These impressions strongly support a permanent installation of the system at TUM. The charitable dish

was a full success as well: 6134 meals and 1988 desserts were sold on one day which results in a donation volume of 1425.60 € in total.

Furthermore, individual interviews conducted during the pilot projects following a pre-defined questionnaire showed that the transparency of the charitable organization and the possibility to participate in the selection of the donation recipient are major factors in determining the success of a social crowdfunding system. Eighty-two percent of the respondents stated that they are more motivated to donate when being involved in the selection process. Moreover, 43% of the respondents said that a lack of transparency prevents them from making donations.

Last but not least, the projects showed that media play a key role in social fundraising. Personal interviews conducted during our pilot projects confirm the high utility of social media to raise awareness for charitable projects. This is in accordance with a recent study published by the German Spendenrat (Spendenrat 2015), which stated that especially donations for diseases and disabled persons were significantly influenced by media. The study also unveils that social media play a particular role for people younger than 40: 24.5% of the study participants aged younger than 40 said that they are encouraged to make donations via social media compared to 9% of the overall population (Spendenrat 2015). It is assumed that the share of students being motivated by social media is even higher than 24.5%.

3.6. Long-term establishment of concepts

Considering the long-term establishment of the projects, the interviews with the project partners showed that both projects require a framework which allows a simple application of the systems and facilitates future modifications. Overhead costs have to be reduced to a minimum. In the case of the deposit bottle donation system, a collaborative partner able to accept and process deposit bottles is essential for an implementation in the long run.

4. Summary and Future Goals

Our project demonstrates that new social crowdfunding-tools need to be developed to leverage the donation potential of students. Micro-donations are one suitable approach to motivate students for donations despite their limited financial assets. Our two pilot projects - a deposit bottle donating system and a charitable dish - showed great results considering their acceptance among the students and the donation volume. The success of the projects strongly supports their advancement and the development of more innovative social crowdfunding-concepts featuring micro-donations.

Regarding future research, it is recommended that this should focus on efficient and sustainable social crowdfunding-systems in particular. Furthermore, the application to other environments than the university and the expansion to other regions need to be investigated due to the highly increased donation potential. This also includes the extension of the target group, e.g. young people in general and not just students.

References

Bundesbank 2013. "Vermögensverteilung in Deutschland." Dr. Ulf von Kalckreuth. Deutsche Bundesbank. https://www.bundesbank.de/Redaktion/DE/Downloads/Bundesbank/Geldmuseum/museumsabende_2013_10_16_presentation.pdf?__blob=publicationFile. August 21, 2015.

Priller, E. 2009. Spenden in Deutschland, Analysen – Konzepte – Perspektiven. Berlin/Münster: LIT Verlag.

Sachverstaendigenrat 2013. "Einkommens- und Vermögensverteilung in Deutschland." http://www.sachverstaendigenrat-wirtschaft.de/fileadmin/dateiablage/download/gutachten/ga09_ana.pdf. August 21, 2015.

Spendenrat 2014. "Bilanz des Helfens 2014." GfK study. http://www.spendenrat.de/wp-content/uploads/spendenrat/downloads/bdh/Bilanz_des_Helfens_2014.pdf. August 21, 2015.

Spendenrat 2015. "Bilanz des Helfens 2015." GfK study. http://www.spendenrat.de/wp-content/uploads/spendenrat/downloads/bdh/Bilanz_des_Helfens_2015.pdf. August 21, 2015.

Acknowledgement

Our project would not have been successful without the contribution of many people besides our project team. We would like to thank the following people in particular:

- Our mentors: Prof. Dr. Alwine Mohnen, Dr. Frank Friess, Dr. Michael Schermann
- Our tutors: Lena Weber, Johannes Feldmaier, Jeremias Heinrich, Andreas Volmering
- Studentenwerk München: Doreen Reinig, Dr. Ursula Wurzer-Faßnacht, Gregor Fricke
- Lebenshilfe-Werkstatt München: Andrea Stauber, Andreas Jehn
- Technische Universität München: Tanja Jovanovic and the entire property management, Thomas Ackermann, Thomas Siewert
- WerkBox³: Detlef Schmitz
- TUM: Junge Akademie: Maria Hannecker, Carmen Klinger, Prof. Dipl.-Ing. Regine Keller, Peter Finger, Prof. Dr.-Ing. Gerhard Müller
- All students participating in our survey
- All donors for our pilot projects and students giving us individual feedback