

Online Homework

Using cutting edge technology to support integration

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The State and University Library at Aarhus, Denmark, is developing a new library service, called "Online Homework". Online Homework is homework help on an online communication platform that connects students to a homework helper for one-to-one help in real time. You will find the web service at www.lektier-online.dk. But as a project Online Homework is much more than a website. A whole organisation of homework helpers working as volunteers is an important part of the project, and we have a challenging task attracting the right young pupils to do their homework online.

About the project – Online Homework

Online Homework is a three-year development project, financed by political means from the Danish state. The project is run by a small group of representatives from The Ministry of Integration, The Ministry of Culture, The Ministry of Education and the State and University Library. The State and University Library holds the roles of both head of the steering committee and project manager of the project.

The project began in April 2009, but the project organisation was established last summer 2009. The project team consist of three fulltime employees dedicated to the project, and the team is located at the State and University Library in Aarhus.

Background – how did we get the idea?

In November 2006 the Ministry of Refugee, Immigration and Integration Affairs, The Danish Agency for Libraries and Media and The State and University Library launched the project "100 new study cafés". The project was characterized by a traditional approach, where the volunteers and students met at a physical study café - for example at a local library. The project objective was to help young people with immigrant background. This project was a success, and there are still several study cafés running very well around the country.

From this project, we experienced, however, that boys in particular stop showing up in the traditional study cafés when they reach 8th or 9th grade (Elementary school). The young boys find it embarrassing to expose their need for help with the schoolwork by showing up at the cafés. Furthermore they are also busy doing other things, like being on the internet e.g.

The Online Homework project idea is based on the positive experiences with the physical study cafés. We now work on extending the study cafés to an online universe hoping to meet especially the young boys online on a platform that can be set to be their home ground.

The Target Group

The primary target group is young people from 7th to 10th grade, living in so-called deprived residential areas, as defined by the Ministry of the Interior and Social Affairs. One of the main purposes of the project is to support students from second-generation immigrant families, with low income and/or otherwise underserved backgrounds and help them get through the education system.

Though the target group of the project is young people from the 7th to 10th grade, living in a few selected exposed residential areas, we do not exclude anyone from using our service. But we direct our marketing activities towards the main target group. During the project period the target group might be extended, for instance by one or more high school classes and/or students from vocational basic schools. Moreover, the project group will consider whether and how it might be desirable to reach out to younger age groups.

The goal of the project Online Homework is to offer nationwide study help by the end of 2011. However, the starting point has been low-scale for a start, focusing on a very confined area. At the opening of the online service in February 2010, we made a very local launch in two residential areas in Aarhus. As a project strategy we believe that the road to success leads through a number of small successes. Thus nationwide study help cannot become a reality unless we begin with focusing our efforts on one or two residential areas. We have a challenging task in reaching a proper balance between the number of pupils and homework helpers. And we also have to ensure a right match between the homework helpers' subject combination and the pupils' needs and demands.

This summer we extend the online homework service, so more young people from more residential areas will be introduced to the service.

The homework helpers working from a callcenter

The homework helpers are placed together in a call center at The State and University Library in Aarhus. They are all volunteers who are dedicated to help young people with their homework. Often the homework helpers are college or graduate school students, looking for experience with teaching and fascinated by the new technical opportunities given by Online Homework. Or they might simply be motivated by the desire to do a good deed for young people with immigrant background. For the volunteers it is a possibility to improve their chances of getting a good job, because you gain teaching experience and boost your IT skills. Furthermore they have a great experience benefitting from the social relations with homework helpers and taking on social responsibility for improving education opportunities for young people in Aarhus and the rest of Denmark.

The volunteers come from different kinds of studies. We have students from molecular biology, political science, medicine, economics, linguistics, and Spanish. Compared to the traditional study cafés, we also have a large number of men who sign up as volunteers.

The homework helpers are recruited directly for the project for at least one semester at a time. They commit themselves to attend our courses in how to use the IT system, as well as how to provide good homework help. And they commit to provide homework help twice a month. They spend two hours helping – currently on Mondays, Thursdays and Sundays from 6.00 to 8.00 pm.

An essential prerequisite for the project to be successful is that there is enough interested volunteers homework helpers. And so far the interest in the project is completely overwhelming. During April and May 2010, Online Homework held a recruitment campaign to expand the team of homework helpers. Beyond all expectations we have a huge number of interested homework helpers. A new team of 35 volunteers, enthusiastic homework helpers are currently being recruited and trained to help young school children with homework. And we have many volunteers who are on waiting lists to become tutors. In an era where many argue that young people only think about themselves and their own needs, it is very admirable that there is so much interest and enthusiasm among students in Denmark.

Training of voluntary homework helpers

Online Homework recruit voluntary homework helpers mostly among students but a few also have full-time jobs. Independently of the homework helpers former experiences, we find it very important to give proper training to all of our volunteers before they start as homework helpers.

The volunteers have to be able to provide homework help to pupils in Danish, English and/or Math in 7th – 10th grade, to provide homework help to pupils of immigrant background and to provide homework help via an online platform.

To address these challenges, we have created two courses to qualify the volunteers to do homework help in Online Homework; a pedagogic course and a technological course.

During the pedagogic course we prepare the volunteers for the educational level in 7th – 10th grade in Danish, English and/or Math. We do this by giving them an introduction to the objectives and guidelines for the specific subjects regarding 7th to 10th grade by the Danish Ministry of Education. The volunteers also participate in a workshop to gain hands-on experience with selected exercises of each subject on each grade.

Moreover, we give pedagogic tools and guidance to the volunteers on how to help pupils of immigrant background with their homework. The target group of Online Homework has other learning conditions than pupils with Danish as their first language. E.g. it is of vital importance that the volunteers define together with the pupil why the specific exercise in question is difficult to understand. Is it the exercise itself or is it the language used in the exercise which he or she finds difficult to understand?

During the technological course the homework helpers receive a thorough introduction to and hands-on experience with www.lektier-online.dk. The purpose of the course is to teach the homework helpers on how to communicate with the pupils online.

After the first introductory courses, we will continue to arrange workshops and courses for the homework helpers. The aim of these activities is to help facilitate the exchange of experiences and to support the further improvement of their capacities as homework helpers.

We will also invite the homework helpers to participate in cultural events and social activities. The aim of these events and activities is twofold. First of all the events are supposed to strengthen the knowledge of the homework helpers on the target group of Online Homework and second of all they are supposed to strengthen the social bond between the homework helpers.

The IT communication platform – how does it work?

The IT platform www.lektier-online.dk - is more than a simple website. It is an online communication platform based on new collaborative tools. The encounter between student and homework helper takes place virtually in real time using instant messaging, web camera and digital whiteboard, where it is possible to use an editor or drawing tools to illustrate in real time. In addition, Google Docs is used for filesharing so that students and homework help can share documents whenever needed.

As a student you can log in to www.lektier-online.dk from any laptop as long as it has an internet connection. Within our opening hours – Monday, Thursday and Sunday at 6 to 8 pm you can get homework help in the categories of Danish, English, Math and "other subjects".

It has been an important issue in the project, that the technical challenges were to fill as little as possible. In collaboration with an external supplier, NetPeople, we have been working hard to specify the technical requirements and develop an entirely new basic solution. The technical platform is based on open source CMS and Adobe Flash Collaboration Services for the whiteboard, chat end videochat.

During the project we are planning an iterative IT development over four stages, enabling us to start with a good basic solution that will continue to be developed.

User involvement is important

Since the very beginning of the project, we have focused on continuously involving users to generate ideas for the design, functionality, flow and usability.

In addition, homework helpers themselves provide new ideas for improvement, and finally we have invited students for "think-aloud tests" in order to test the usability of the site and provide input for further development. User involvement is an important exercise, as it helps ensure that the project and the IT developments meet the user's needs. It is important to learn together with the users and base the ongoing development of the site on user experience.

Several improvements on the way

In collaboration with the supplier NetPeople, a series of new demands for improvements will be developed during the autumn 2010.

Marketing activities

The long term goal of the project is to encourage more young people with immigrant background to take an education. With this project we still have a great task ahead of us. No matter how good a service we offer, it still is all about homework. To the target group Online Homework is perhaps a new and exciting way to receive help with their homework, but it is still homework and the demand for the service is not very high among the target group. We have to create awareness of Online Homework among the youngsters. But we also have to create a positive attitude towards doing homework and thereby changing the behavior of target group, so they start doing their homework using www.lektier-online.dk.

Given this type of target group in Online Homework the marketing is expected to be a very demanding task, consisting mainly of outreach activities. In this regard, personal presence and engagement is considered to be of significant value, and we thus cooperate with a number of ambassadors around the residential areas.

Our main strategy is a network strategy based on the assumption that we must reach young people through people they know them and trust. Hence contact with the target group through ambassadors will take place by use of different actors, particularly teachers, social workers, librarians, parents etc.

We are planning a "Tour de Online Homework", where the project team will visit several schools in selected deprived residential areas. Here the pupils will get an introduction to www.lektier-online.dk by showing them a demo video. We cooperate with the teachers and offer new types of events at schools. For example pupils could test the site as part of teaching sessions in Danish or a math

class. By letting the students test the site in a safe environment with their classmates, we hope that students will have fun and a positive experience receiving homework help the first time online.

The project also makes use of viral marketing by using pre-existing social networks to spread the word. The aim is to spread the word of mouth through the use of ambassadors within the target group and adults around them. We wish to involve the existing users in the marketing campaign, and plan to setup a competition between selected schools. Schools are to compete with each other to create the coolest mobile phone advertising concept. The films will be distributed on Facebook, where the pupils can vote for the best film.

Another way we do involve the existing users in the marketing campaign is by a selected group of first movers. They will be introduced to the site before launch and they are invited to special events, usability test etc.

Our experiences so far

Online Home work is still in its initial stage. We have been online for four months – from late February to late June 2010. In the first period we have gained a lot of experience of great value to the project further on. www.lektier-online.dk will open again when the pupils return to school after their summer holidays. For now we are satisfied with our experiences. We have received positive feedback on the site from both pupils and homework helpers. And we think we have a good basic communication platform with a lot of opportunities. A typical session of homework help lasts all from five minutes and up to two hours, and most students are satisfied with the process. We end each session by asking students if they have received the help they asked for. 62 percent say yes, 12 percent no and 26 percent do not know. We are quite satisfied with that result for now. Some students come with an expectation that we can do their homework for them. And of course we cannot comply with this, as it is not the purpose of homework help. Therefore it might be difficult to achieve a much better rating of satisfaction.

So far about 370 students have created a user profile on www.lektier-online.dk. This is a high number of pupils, given the early stage of the project and since we have only made a very limited launch in two disadvantaged neighbourhoods in Aarhus. During the first few months 10 pupils on average have received homework help on every opening evening. This coming semester we will expand the service further on to more residential areas in Denmark. And we also extend the opening hours from three to four evenings a week.

Perspectives as a library service after the project

The State and University Library views Online Homework as a new kind of library service. During the project period we will hopefully gain all the experience we need to make it a national service

targeting not only selected residential areas but to the whole nation. We intend to offer one-to-one tutoring and/or homework help on the online platform not only to elementary school kids, but also to secondary school students and technical college.

We also think of Online Homework as a service which can be expanded in many ways. Including more subjects is one way to expand. Another way is availability. An online service will be expected to provide services that are available 24/7, or at least every day.

As a library service Online Homework has great potentials. In Denmark we experience that parents go to school to understand their children's homework. Whether you are a professor of Danish literature or car mechanic homework with the kids can be a contentious affair. But it is most difficult for those families where the parents read, write or count so poorly that they cannot even help their smallest school children with their homework. It is a humiliating and frustrating situation for adults. And here The State and University Library can play a very important role as a national service provider of online homework in the disadvantaged communities.

In Denmark we also see more and more privately held provision of homework assistance. For 300-400 Danish kroner an hour impatient parents can buy a professional boost to the children of a private provider of homework help. If you can afford it.

At the State and University Library, we must support the activities of the public libraries by developing relevant services. In the above perspective it makes perfectly sense that public libraries should make an alternative offer of free online homework help as a natural part of the local library services to all citizens in their community.

As a communications platform Online Homework is a service that can be targeted and designed for other purposes than homework. As a modern communication platform Online Homework can be used for other library services that truly help the citizens in the community with what they need most. For example, the platform could be used by the public libraries to provide online learning and career services. It could be one-to-one help writing CV's and finding a job, it could be one-to-one career advisor, or it could be used for more traditional library services, where the librarian meets the user one-to-one and provide online help with more complicated research, ordering books and articles online.

On a modern communication platform such as Online Homework the one-to-one service is available online from the library or from home, but the costumers will never be far from the library's services.
