



Course Description

***IDEO Human Centred Design
Course***

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Project Consortium: University of Applied Sciences Magdeburg-Stendal (Germany); Aalborg University (Denmark); Lapland University of Applied Sciences (Finland); University of Lincoln (United Kingdom); University of Ljubljana (Slovenia); Potsdam University of Applied Sciences (Germany); Tampere University of Applied Sciences (Finland); University of Tampere (Finland); YMCA University of Applied Sciences (Germany)



IDEO Human Centred Design Course

Offered by +acumen in Nov/Dec 2014, facilitated locally by James Field & Martyn Thayne, University of Lincoln; Christine Goutrié & Björn Stockleben, University of Applied Science Magdeburg-Stendal

Abstract

The IDEO Human-Centred Design Course is a public MOOC-style course that is regularly offered by +acumen, a nonprofit organisation, to spread the knowledge on human-centred design with focus on designing innovations for solving the grand problems of humanity. Based on IDEO's design toolkits, the participants are introduced to service & product design with a focus on prototyping experiences. Participants are encouraged to form local teams that connect with other teams on a MOOC platform.

Course Description

As the course was not designed by the OnCreate consortium it is more appropriate to use the description from the original creators and to link through for more information.

The following is taken from [+acumen's website](#) (accessed 4th July 2017):

Human-centered design (HCD) is a creative approach to problem solving pioneered by the design firm IDEO.

This is an intensive, hands-on learning experience that will challenge you to get out of your chair and out into the real world to talk to people and test your ideas. You'll leave this experience equipped and energized to apply the human-centered design process to challenges across industries, sectors, and geographies to generate breakthrough ideas.

What you'll learn:

- *Master the 4 steps of the human-centered design process to create innovative solutions to real-world challenges*
- *Build an effective interview guide to learn and document your use research*





- *Gain strategies for synthesizing your user research and identifying opportunities for design*
- *Practice creative techniques to build rapid prototypes and make your ideas come to life*
- *Learn to effectively test your prototypes with real users and identify promising solutions to begin implementing*

Course Partner: IDEO.org

IDEO.org is the nonprofit arm of the world-renowned design firm, IDEO. They design products, services, and experiences to improve the lives of people in poor and vulnerable communities. They are experts in human-centered design, a creative approach to problem solving.

Collaboration Mode

- **Parallel Assignments:** Student groups from different universities work on the same assignment.
- **Asynchronous Collaboration:** Using asynchronous communication tools like forums, shared documents, shared folders. A particular interesting form of asynchronous collaboration are Design Thinking processes where each partner builds on the existing work of the other partner.
- **Integrated Project / Virtual Team:** Students form real virtual teams, with intensive collaboration (and intensive coordination needs).
Complementing Assignments: Student groups from different universities work towards the same goal, but in loosely coupled work packages.
- **Synchronous Collaboration:** Collaboration using live tools like chat, google docs live editing and online conferencing software.

Duration, Intensity & ECTS

As with the Collaboration Methods, the logistics of the course varied between institutions. The details of which are listed below to demonstrate that the course can be run as either an extension to an existing curriculum or as an extracurricular activity:

Lincoln

As with all student participation in OnCreate courses, IDEO Human-Centred Design for Lincoln students was an extracurricular commitment. This is due to the inflexibility and inability of most British HE curriculums to





support the ease of swapping credits for ECTS. This didn't prevent participation however, it just meant extra incentives were required to promote and recruit to the course as an extracurricular activity (see Experience Report).

In extracurricular mode, the course ran for 7 weeks with a physical studio meeting of all Lincoln participants on Wednesday afternoons. The intensity was moderate with students working intensively during the 3 hour Wednesday studio sessions and contributing/augmenting ad hoc in between.

There were 0 ECTS awarded to Lincoln students but all who participated were eligible to have the time spent working on this course counted towards an optional rewards scheme for volunteer work.

Magdeburg

In Magdeburg, students were able to participate in the course as an elective course worth 2 ECTS as part of a module called "Design Methods in Cross Media". The students were accustomed to online team collaboration as they were all part of the same blended learning master programme in Cross Media.

The students formed three teams of 4 students, who participated in the full course over two months. The course was in parts mirrored on Magdeburg's own moodle platform and all assignments had to be submitted both on NovoEd and on moodle. Two faculty members followed the course as well and were giving additional individual feedback to the teams. The relation to the teaching staff was on peer-level, due to the common course experience.

All groups finished the whole course, there were no dropouts.

While the teams relied both on means of synchronous online collaboration, mainly through adobe connect and skype, and some physical meetings, contact with the teachers happened asynchronously via forum posts on moodle and sometimes on NovoEd.

There were online exchanges with teams and staff from Lincoln, but no creative collaboration beyond the work within the online teams.





Platform

NovoEd

This was one particular instance where the choice of platform was out of the hands of the consortium. Because the course was created by +acumen and IDEO, they were responsible for selecting the hosting platform. They chose NovoEd to host this course.

Although this was the consortium's only experience of NovoEd, the experience was very positive. It has been treated as an example of one of the OnCreate outputs.

More can be found on NovoEd as a host for online courses on the document *Learning Space Description — MOOC-Platform Centred Courses*.

Google Drive

The NovoEd platform (above) embedded some of Google's Drive functionality directly into its interface. This allowed those with connected Google accounts to create and share documents effectively with a project 'workspace' that only displayed Google Drive documents created for this course (from all users).

More can be found on this by visiting the link to the discussion on the NovoEd platform above.

Google Hangouts

Additionally, although not used, the NovoEd platform allowed you to make a Google Hangout all to all participants that had connected their Google accounts. This feature would have been excellent for teams working remotely, but because the OnCreate consortium partners worked in local groups, this feature was not required.

There were many teams that did work remotely (some with strangers that became connected to via this project's community aspect), and from anecdotal content on the course forum, the feature appeared to be well-received.

Method

Facilitator Round-robin and Student Empowerment

As the task for this course was team-based, IDEO gave us ideas for how to manage the process in terms of leadership and roles. One of their suggestions was that there should be a facilitator for the workshops instead of a leader who would be objective in the delivery of pertinent information





and oversee discussions. We took this a step further ...

As we were working in teams of staff and students, and because the topic and method of learning was relatively new to us all, we decided that both tutors AND students take it in turns to facilitate the workshops. This allowed the students who volunteered an opportunity to feel empowered and it helped develop a sense of empathy towards their tutors as well as going some way to tearing down the notion of the traditional power hierarchy of “us” (staff) and “them” (students). In this model, power was shared equally so the students who participated felt valued and respected.

OnCreate Evaluation Methods

At this juncture, the Evaluation Methods specified by the OnCreate consortium had not yet been implemented. Evaluation was collected informally via a de-briefing in Week 7 (see Curriculum and Experience Report below).

Curriculum

The curriculum for the Human Centred-Design course was set by IDEO and +acumen. It ran for 7 weeks and featured 5 weeks of set reading and tasks:

Week	Theme & Activities
Week 0	Introductions, Orientation to NovoEd platform & Team Registration
Week 1	An Introduction to Human-Centered Design <ul style="list-style-type: none"> • Readings: Overview of Human-Centred Design <ul style="list-style-type: none"> • What Is Human-Centered Design? • Design Thinking for Social Innovation • Mindsets: Design Thinking • Case Study: Clean Team: In-Home Toilets for Ghana’s Urban Poor • Workshop





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| Week 2 | Inspiration Phase |
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- Readings: Overview of Inspirations Phase
 - Step 1: Choose a Design Challenge
 - Step 2: Plan Your Research Methods
 - Step 3: Build Your Discussion Guide
 - Step 4: Additional Research Methods
 - Step 5: Capture Your Learnings
 - Case Study: Vroom: A Human-Centered Take on Early Childhood Development
 - Methods In Action: Immersion
 - Workshop
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| Week 3 | Ideation Phase |
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- Readings: Overview of Ideation Phase
 - Synthesis
 - Step 1: Capture Your Learnings
 - Step 2: Search for Meaning
 - Step 3: Create “How Might We” Questions
 - Step 4: Generate Ideas
 - Step 5: Select Promising Ideas
 - Prototype
 - Step 6: Determine What to Prototype
 - Step 7: Make Your Prototypes
 - Step 8: Test & Get Feedback
 - Step 9: Integrate Feedback & Iterate
 - Case Study: Moneythink Mobile: Designing Digital Tools to Build Financial Literacy
 - Methods In Action: Rapid Prototyping
 - Workshop
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Week 4	Implementation Phase <ul style="list-style-type: none">• Readings: Overview of Implementation Phase<ul style="list-style-type: none">• Step 1: Understand Your Target• Step 2: Create an Action Plan• Step 3: Launch Your Solution• Step 4: Keep Getting Feedback and Iterating• Step 5: Scale Towards Impact• Case Study: SmartLife: Designing a Scalable Water and Hygiene Business• Methods In Action: Live Prototyping• Workshop
Week 5	Moving Forward <ul style="list-style-type: none">• Readings: How to Scope Your Next Challenge<ul style="list-style-type: none">• Step 1: Dissecting a Design Challenge<ul style="list-style-type: none">• Design Challenge Example 1• Design Challenge Example 2• Design Challenge Example 3• Reflect on the Process• Gain Inspiration from the Online Community• Workshop
Week 6	Work on team response
Week 7	Submit team response Evaluate other team's responses Reflect on experience

Experience Report

Lincoln University — James Field, Lecturer

It was suggested that each member of the OnCreate consortium participate in the Human Centred-Design course where appropriate. For Lincoln, creative and design thinking are key skills our students are expected to develop so we found this opportunity enticing. An additional benefit was the opportunity to engage with people in our local community, something we tend not to do within the Lincoln School of Film & Media. That is not to say we do not acknowledge or support our local community but engagement usually comes in the form of invitation to view or interact with our work after it has been completed. The notion of considering the local communities needs and responding to them is definitely a new



experience for the staff and the students within the school. Finally, it was an opportunity to experience first-hand what it is like to work on a blended learning course, something that appealed to the pedagogical researcher in me.

As with nearly all participation in OnCreate-themed projects, Lincoln's contribution was extra-curricular in nature. We put out a call for interest and had 12 students from 3 different programmes within our arts college reply. Additionally, 6 members of staff (myself included) from across 3 different schools/colleges also volunteered to help. It was noted that all participants would meet up on Wednesday afternoons for 3 hours to work on and respond to tasks set by the course. It was also suggested that we work for 3 hours as individuals in our own time. This would ensure we met the requirements for suggested time allocation made by the course creators. Meeting on Wednesdays was fortuitous for us as they are timetable-free days for our staff and students and the course materials were released on a Tuesday evening meaning the readings were fresh in our minds when we converged the following day. It also meant we felt "on top" of the workload. This was essential when trying to maintain commitment and manage time with an extra-curricular activity.

The first week was about understanding the task, establishing teams and responding to our existing understanding of HCD and Design Thinking. We were able to establish 3 teams with staff and students distributed equally and as equals.

As the weeks progressed the challenges became more difficult and required frequent contact with an external working group from our local community. The demographic of this was dependent on the Design Challenge each team opted for. My particular team's challenge was focused around enabling and supporting young people to become entrepreneurs in projects for social change. I really enjoyed this theme as it resonated with my research at the time. However, due to the time of year, and the notorious difficulty in working with young people (privacy, security, police checks, etc.) it was difficult to gain direct access to our demographic, we always seemed to have to go through an intermediary. This slowed down the





process and questioned the validity of the engagement. Had this been a curricular activity, we would have invested more time in the logistics of access to our demographic. As it turned out, all the work from the course added to our current workloads (staff and students), engagement was very light meaning it was difficult to evaluate our response as having an potential for impact.

That said, many positive experiences were had from participation on this course, and every staff and student member who contributed to the entire process left with some sense of accomplishment and some new skills “under their belts”.

Personally, I enjoyed my first experience of blended learning. It was blended because of the way we managed engagement with the teams. It could quite have easily been flipped learning and I still would have left with a positive experience and suggestions to how OnCreate should prepare and run their collaborative courses in future.

The standout positive I take from this experience was the NovoEd platform and the quality, clarity and usefulness of the course materials provided by IDEO. Earlier in this document there is reference to the attributes of the NovoEd platform. My thoughts are expressed more appropriately there regarding this tool. The course materials were just so positive in their presentation and structure, it felt like I was being led without an actual individual standing in front of me. This felt empowering and provided me with a glimpse of the potential for teaching and learning using this model.

In terms of the student’s experience of participation, as mentioned above, this course came before the OnCreate Evaluation Frameworks were ready so feedback was gathered informally during the reflection session in the final week of the course. Student’s opinions mirrored my comments about but also included positive remarks regarding empowerment of learning with staff, not just from staff and the flexibility of online learning. They also really enjoyed the social aspect of teams working/ competing in the same physical location simultaneously.





Read more about our experience with the following blog posts:

<http://colab.lincoln.ac.uk/a-new-endeavour-for-colab/> — An introduction to our approach

<http://colab.lincoln.ac.uk/hcd-short-course-week-2/> — A detailed look at early project engagement

<http://colab.lincoln.ac.uk/hcd-short-course-complete/> — The completed response from one of the teams (my team) and certification of completion

University of Applied Sciences Magdeburg-Stendal

The course as such was an intensive and motivating experience for the students. Both the experience inside the team as well as with other teams online was valued.

“The workflow in our group was intensive, with a wide variety of skills and supporting. To discuss different topics in a group was definitely mind-broadening and sometimes exhilarating as well. We think the HCD method could be a good alternative as concept tool for upcoming projects in different worksituations. Working in an obliging setting as cooperation team, with external contacts to experts and professionals was satisfying and demanding at the same time.” (Team 1)

“We really liked to work on solutions for a real problem, not only being a part of a „problem simulation“. It was a great experience to see in which kind of theme chaos we were starting and in which good structured problem solution we ended. Working as a design team it is always so much fun to inspire each other especially in the phases of inspiration and ideation and even more if the team members have different professional backgrounds. It was great to have the possibility to look at the results from the other teams who joined the course.” (Team 2)

The NovoEd platform as such provided a comparably good social online environment. The impression of the staff was that it was easy to get in contact with other users outside the own team, which was by and large confirmed by the evaluations. However, contacts remained task-related,





there was no phatic communication or “hanging out” on the platform. One team had remarks on the complexity and limited adaptation to design processes of the generic NovoEd platform:

“The Novoed Platform itself was partly too complicated to work with or to get direct feedbacks from staff and community. We think there are better options to embed informations and results from the workshop participants.”

Additionally to IDEO’s own feedback form, we made an own survey with open and closed questions among 22 participants from HS Magdeburg-Stendal and Lincoln University. Main findings were:

// Sociability of the NovoEd environment was surveyed with an adapted version of Kreijns et al. (2007) sociability scale. It scored well on assignment-related sociability, it was easy to contact other participants and people did not feel lonely. It scored slightly less on colloquial, non-taks-related sociability.

// We found no indication of a correlation between satisfaction with the NovoEd environment and the experience with online collaborative courses.

// Google Drive/Docs is the most common collaboration tool. The search for the perfect online ideation & sketching tools is on, spanning countless alternatives like iScrumboard, MindManager, padlet.com, easel.ly, stormboard, realtimeboard.com & spacedeck.

A common assessment by the staff was that integrating external online courses should always be complemented with staff consulting, because it increases the success and satisfaction among the students. The reflection of the external course with the participating teams is a valuable process.





Material

As mentioned previously, this particular course was created and hosted by entities outside of the OnCreate consortium. Therefore, all materials were created and hosted externally, possibly subject to copyright and redistribution restrictions. They are not included here.

Literature

Design Kit

<http://www.designkit.org/>

This resource was created by the same people (IDEO.org) who provided the challenge and learning materials for this course. However, this particular resource is free and an excellent source for learning about and running Human-Centred Design projects.

Design Thinking

<https://dschool.stanford.edu/resources/>

In order to get into the correct 'mindset', it was suggested to the (Lincoln) students that they understand and follow the d.school's approach of Design Thinking. There are a number of resources available through the link above that support a human-centred design approach.

