

Design as Common Good

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Designing a curriculum: From technical-rationality to pluralism and values

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Abstract | In this paper we will present our insights, experiences and reflections around developing a design theory course that connects acting and theory in an applied manner. This course has been unfolding since 2014, within an existing environment and had a sustained and expanding effect on the learning environment. At the heart of our learning and teaching approach lie participation, democratic decision making, responsibility and, among others, systems thinking, cybernetics, and elements of constructivist thinking, including selected elements of transition design, action research and designing for social innovation. In our learner-centred approach it is not only what we learn, but how we learn. This includes the social dynamics we try to foster and making these explicit as particular values (Bela Banathy, Arthur Costa, Linda Booth-Sweeney). Our underlying claim is that there is evidence that some students participating in this course will not only consciously shape their learning experience but also become responsible actors in view of the common good. Learning and life converge in our setting. This text describes this process from a ten year perspective and builds upon several earlier articles.

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1. Introduction

In July 2010 I participated in the annual conference of the American Society for Cybernetics (ASC) taking place at Rensselaer Polytechnic Institute (RPI) in Upstate New York, Troy. The theme had been conceived by the then president of the ASC Ranulph Glanville. The conference, titled 'Art - Design - Mathematics', was distinct for several reasons and had a lasting impact upon my own teaching and PhD supervision. Firstly, central to the conference was that it was not about giving papers and thus listening to answers, but working actively in groups and instead having interesting conversations and 'more fully harness the collective potential of groups' (Dyer et.al., 2015). Assuming that through conversation and the inclusion of multiple viewpoints from different disciplines interesting questions would arise. In essence it was about acting in view of new futures. Second, how the activities and interactions were conducted followed the Banathy Conversation Methodology (BCM) (Dyer et.al., 2015). BCM was developed in the early 1980s by systems scientist when they realised that they accomplished more in the breaks of their conferences than in the actual sessions.

After this intense conference I asked myself: How can we as educators connect learning and teaching with these values of encountering others on an eye-level in listening and conversation? How can my design students learn about ethics, values and responsibility and incorporate those into their own thinking and practice? What impact might such an education have on the common good? For this I looked at different ways of teaching and learning. In this process Ranulph Glanville invited me to co-teach Ph.D. research seminars together with him at Sint Luca School of Architecture in Ghent and Brussels as well as at the Royal College of Art in London. In our first joint sessions we tried out cybernetic and constructivist approaches in which we involved PhD research students in workshops experimenting with critical reflection and feedback (Glanville, Hohl 2012). In this unstructured format knowing emerged from reflections on past experience and constructing reflective narratives that found their way into physical and embodied models. The process helped the students to gain new insights into their professional practice and make experience more explicit. Here we realized the importance of a safe learning space, of embodiment, situatedness and the role of emotions for learning (Hohl, 2016). We treated the students as younger colleagues and presented us as learners as well. While we were learning, together, it became clear to us that how we learn and how we feel when we learn were intrinsically connected. For the participants this learning also was a community practice, taking place in language and action (Glanville, 2014).

After Ranulph passed away in December 2014 I pursued this investigations on my own – together with undergraduate students in Dessau, Germany. Together we looked at models that connected theory and methods to values and culture. During field research i became aware of the 'Eight Key Elements of Education' by the Polynesian Voyaging Society in Hawai'i, which I found particularly inspiring, as they connected theory with activities around everyday life scenarios (Polynesian Voyaging Society, 2007). Also relevant became Linda Booth-Sweeney's 'Habits of Mind of a Systems Thinker' (Hohl, 2017), and we connected these insights with a curriculum that created an awareness of systemic effects.

From Neil Postman (Postman, 1969), Carl Rogers (Rogers, 1974, 1975) and Paolo Freire (Freire, 2005) i learned to take the learners, their backgrounds, serious, and encounter them with openness and empathy. Ivan Illich (Illich, 1973) taught me about the convivial dimensions of designing. From Alice Water's 'School Gardens' (Waters, 2008) and Fritjof Capra's Center for Ecological Literacy i learned about the interconnectedness of applied learning within an integrated educational framework in which, for example, different disciplines such as math, art and biology are integrated within a single course (Hohl, 2015). From David Orr (Orr, 1991) and Nainoa Thompson (Speidel, 1994) I understand that learning needs to be connected to values and community. For example, teaching in a school garden, akin to the design studio model (Schon, 1985). Here theory and practice are connected through acting, and then connecting this knowing with the human body, health and nutrition once the (educational) garden produce is later prepared together in the kitchen. Their acting becoming knowing within an integrated collaborative and convivial community experience, also nourishing the common good.

From my own PhD student supervision i learned that connecting research, responsibility, ethics and values is something that must be adopted early on and not during a higher, post-graduate degree. I became aware that it might be crucial to focus upon the newly arriving students in their first semester. Together with Mathilde Scholz, a Bachelor student with a degree in social sciences, we subsequently began conducting experiments with first-year Bachelor students from design, applying an action research based approach of teaching design theory to first year BA students integrated design (Hohl, Scholz, 2020a, 2020b).

It is important to note here that Mathilde had studied theory with me from her second semester on, and was familiar with my particular approach to teaching. We often had conversations about my style of teaching, reflective practice, cybernetics, feedback, Banathy, Glanville, Schön, Postman, Rogers or Illich. Also worth mentioning here is that two former Bachelor students which completed their degree here, returned as

lecturers after completing their MA degrees at other universities. For both it is important to connect theory and practice through relevant exercises and reflection.

Another important educator in our learner centered approach is our colleague Professor Brigitte Hartwig. She teaches Social Design and in her teaching & learning approach the students learn designing by identifying local problems in the town of Dessau itself and engage in the local community. Part of this is the Vorort Haus, an initiative where students develop design projects off-campus in a formerly vacant building in the city centre. It is here where students can explore new ideas for service designs and experience the effects on people and the community.

In this paper I try to weave together our ten year explorative learning journey into teaching design research & theory to students of art, design and architecture, involving community building, feedback and reflection within a framework of cybernetics and systems thinking. We conclude with a critical review of our own teaching methodology.

2. From learning 'what' to learning 'how'.

2.1 Our learner-centred approach

During field research on the island of Oahu, Hawai'i, in 2014, I became aware how influential the teaching approach of the Polynesian Voyaging Society is. The students learn and act in mixed groups of younger and older students. It is a peer teaching model taking place mostly outdoors doing something for the community. While the students also learn about the stars as navigational aids, and about local flora and fauna, they also engage, while doing so, in communal activities such as keeping footpaths clear, planting shore vegetation, weeding invasive species of plants, collecting refuse as well as cleaning and maintaining boats. Here all learning is embedded within a larger framework of contributing the community, the common good and connected to values and a meaningful way of life. Learning becoming a way of life, a life project. My observations of how learning developed there defied Donald Schön's description of theoretical knowledge of being of more value – in higher education - than practical knowledge and the more general and theoretical knowledge was, the higher it was viewed (Schön, 1987). On Hawai'i theory and practice seemed to complement each other and appeared very much integrated (Hohl, 2015).

Another confounding aspect for me was that in these communal activities a leader seemed to be missing. Everyone was busy co-operating and co-ordinating but to my

knowledge there was no overall 'plan', and an agenda was missing. Everyone appeared to know what needed to be done, and a leader seemed not to be necessary. I experienced this absence of an agreed organised structure as confusing and frustratingly unclear (Hohl, 2015). However, at the same time it was impressive to observe that it was indeed possible for things to get done in absence of a single person 'calling the shots'.

As an educator teaching theory I asked myself: How might I achieve such a degree of autonomy and intrinsic motivation among my students in my own teaching?

In cybernetics one also learns from the elements observed in complex systems. For example, order arises by itself and is not imposed top-down. (However, structure is not organisation. A seminar should be structured as students are used to structure and expect structure.) Organisation however is taking place on its own. This was a gradual insight, emerging over time and has been elaborated in another paper (Hohl, Scholz 2020). From Mathilde I learned that structure was essential for emergent self-organisation to take place. It appears that where everything is possible, it is harder for something to become actual. Freedom seems to require structure, in order to unfold.

Systems thinkers Michael Stone and Zenobia Barlow (Stone & Barlow, 2011) recommend to delegate and to not try to do everything on one's own. In their Essay "Cultivating conditions for institutional change" they write: For systems change foster community and cultivate networks. Work at multiple levels of scale, top-down, bottom-up, outside-in and inside-out. Create space for self-organization. Let go and do not try to control, trust, people are responsible actors if you let them. Facilitate – do not dictate the direction. Have patience, change will take time. And finally: Be prepared to be surprised. The relevance to design education has been discussed in Hohl, 2015 and Hohl, 2018.

We realised that 'how' we learn is as important than 'what' we learn. The way we feel when we learn, the interactions, conversations and the social dimension play an often neglected role. Students are not only learning to design, they are becoming designers. A profession and particular mindset of looking upon the world and interacting with people, in- and outside the discipline.

This attitude and mindset would also be mirrored by the conversation rules of systems thinker Bela Banathy, first experienced at the 2010 ASC conference, mentioned above. To these we tried to aspire to in our discussions and conversations:

Bela Banathy's conversation rules:

- display tolerance, patience, and consideration to others;

- honor and respect each other;
- listen to others, attempt to understand the point of view being expressed, reflect, and respond;
- do not dominate;
- do not offend;
- avoid losing control of one's feelings;
- view all ideas as contributions to the group for consideration, accepting that not all ideas will be used;
- allow free exchange and public ownership of ideas;
- allow equal opportunity to participate;
- stand for what one believes in;
- allow equal opportunity, but take responsibility for actions and decisions.

(Dyer, et.al. 2015)

Between 2016 and 2020 these practices, together with continuous feedback from our students, transformed into a new format of learning with unexpected systemic repercussions upon the culture of the faculty of design.



Figure 1. In the student room [cloud], students organise their own extra-curricular events. On 'monday pitch' they present their ideas and provide one another with constructive feedback, at other occasions they organise teaching & learning activities, for example workshops to learn a particular software (Grasshopper) or methodology (such as Agile or Scrum), not offered by any modules.

Students got more engaged, not merely in their own projects, but also in creating a community of learners on the campus. They spent more time at the university – instead of working alone at home. Step by step more students moved to Dessau, which before had been commuting to lectures from larger cities such as Berlin or Leipzig. A growing community emerged, centred around a new student room, the [cloud] room, which a group of students is in charge of (Figure 1). Students felt empowered and got actively involved experiencing the effects of their initiated changes. They began laying out the design of the room, based on their own needs, then designing and making the furniture. From there on they established a particular way of organising and managing the room following democratic 'new work' principles (Laloux, 2014), leading to a strong sense of ownership, empowerment and self-efficacy.

As the semester passed by the emerging change gathered momentum and resulted in other activities, on and off campus. Among those extra-curricular activities was perMA, an initiative of Bachelor students conducting voluntary weekly workshops with students, staff and teachers in co-designing a new, learner-centred Master's program. Their workshops began with the question 'How would you like to learn?' and from there developed the format together with various stakeholders over the course of the semester. Together they identified needs and constraints and developed a distinct program. The 15 workshops each lasted two hours and were continuously documented in great detail. After the sessions facilitators as well as participants took time to contribute written reflections and feedback. These were analysed, discussed and applied in the following session. Subsequently the core members of the perMA group collated and analyses the data, conducted interviews with experts and compiled a highly constructive and reflective publication, laying out the results but also giving instructions on how to conduct such workshops (Figure 2). The book was published in Summer 2020 via a crowdfunding campaign and supported by the dean of the faculty of design. The publication concerns solely *how* students wish to learn, the various formats and interactions, not *what* is being learned. The format can be adapted to different styles of learners and is flexible to adapt to learning any subject. It is about the 'how' and 'why' of learning. The core insights reflect were: Working and learning in groups, on projects of their own choice, creating real world change in their immediate environment. The workshop itself being an example of that method.



Figure 2. The 'perMA – Prototype of a new culture of learning' publication. 287 pages long it documents the extra-curricular workshops conducted on campus, insights from the workshops as well, and contains several interviews with experts on learning and curricula development. Many of the tools developed during our theory seminars were applied here, such as the different ways of giving and receiving feedback.

Another initiative is the AG Curriculum, an open workgroup which meets every Tuesday evening. It was initiated by a group of teachers and students following a three-day conclave meeting in which the curriculum was discussed. All members of the university are invited to participate. It is composed of students, teachers and members of staff interested in changing the curriculum, meaning how we are teaching and learning together.

Some of the student members have also become student representatives/members of the board of the university. A third-year student has herself become an accreditor and is evaluating curricula and performance of other universities.



Figure 3. The Curriculum workgroup (AG Curriculum) meets every Tuesday evening. Here students and teachers work together on designing new ways of learning and teaching. It is about peer-teaching, encountering each other on an eye-level, learning from one another in small groups and finding consensus. In the session depicted we are calculating group sizes for vertically integrated groups of BA and MA students.

2.2 Vorort Haus, the city as a laboratory

The town of Dessau is an aging and shrinking city. While in 1992 112,216 inhabitants lived in Dessau, in 2010 there were 86,840 people (INSEK, 2013). Annually the city is losing on average around 1000 inhabitants. At the same time Dessau is among the European cities with the highest average age of around 53 years, making it one of the 'oldest' cities in Europe. Once young people complete school or university they mostly leave Dessau and move to larger cities, which also offer more interesting job opportunities. As a result it is a quiet town, with many vacant spaces, uninhabited buildings and ruins. And as such a place full of opportunities.

In 2012 a group of teachers, former students and locals tried to save a dilapidated 19th century hospital building located in the city center. This building had been empty for many years and was deteriorating. They began making much needed repairs and became a registered society. They named the building 'Vorort Haus', Vorort meaning both suburb and at-the-location. Their first goal was to save the building from further

decay, then to create studio spaces to work in and also to maintain the extensive garden and out-buildings. Today these have been transformed into workshops for printing, welding, and mending bicycles, among others.

After a while these actions were supported by the local council, in order to support young people wishing to stay and change things.

Many of those involved had ties to the University and from 2014 on some of the students involved in running the student room [cloud] also got involved at Vorort, as part of the Service Design seminars of Professor Hartwig.

During this time the University also recognised the importance of the Vorort Haus, in which some Summer Schools were taking place and began to support it. As the state of the building was gradually improved - a large part still is under construction today - the leaking roof was being repaired, a kitchen designed, built and installed, students began taking studio rooms there, to create co-working spaces or have a temporary space to design their thesis projects. Subsequently taking their first steps towards self-employment as designers. Within this protected space it has become possible for them to take ownership of their design idea, for example their final thesis project, and perhaps try to convert it into a business idea. With this protected framework it may succeed but may also fail without great risk. Others use their studio space for more recreational activities such as making music or painting. Many of this learning and entrepreneurial activities involve students and thus are related to the university, but are taking place outside of its 'formal' boundaries, which are more likely to be associated with rules of access, delays and opening hours. Moreover an increasing number of Bachelor and Master thesis projects engaged in themes such as learning & teaching, food, health, gardening, and nutrition.

2.4 Thesis projects on themes around learning & teaching, participation, environmentally friendly housekeeping and sustainable eating & food waste.

Mathilde Scholz, also one of the initiators of the [cloud] room and the perMA project described above, did her Bachelor's thesis project around learning and teaching, completed in Spring 2019. Her thesis was titled "Learning-culture at the school of design: Teaching and learning between needs, challenges and potentials", and used our joint 2018 1st semester seminar (described above) as a case study of the efficacy of our student centred approach, described in more detail in (Hohl, Scholz 2020a and 2020b). It also discussed the [cloud] student room, the AG Curriculum, and extensively the importance of feedback and empowerment for student motivation. Central to her insights is the changing role of the professor, from that of a remitter of projects, to a supportive expert, learner and facilitator, who prepares the fertile

conditions for students learning journeys, either as individuals or in groups. When students select their own topics for the projects they become intrinsically motivated, take ownership of their own learning process and feel empowered. Often students select projects that are meaningful to them and stem from own experiences or observations. One of which was Mathilde's investigation around the best conditions for learning how to design.

Another thesis project was conducted by Master student Nadine Ungefucht. Her project 'Mit-tag' centred around food and nutrition. Her initial interest was about more healthy eating on the campus, with the goal of improving the quality of students' eating habits, and perhaps the quality of food prepared on the campus. As part of her research process she organised a weekly food-sharing event (Figure 4) on the campus commons, sharing food and conducting interviews, mainly to get a better understanding of students' relationship to food and nutrition.



Figure 4: Weekly food sharing events as part of Nadine's MA thesis project, centred around food and nutrition. Within her research process these events turned into a community building event with participants from different faculties and backgrounds.

As it was Summer her weekly one hour lunch-sharing sessions were located outdoors. Everyone was invited to bring a dish and share it with others. In the beginning only a handful of students participated, but through word of mouth soon students from other faculties joined in, and within several weeks up to 25-30 people attended, sharing their dishes and trying other foods. During her research Nadine

discovered food as a strong element that can bring people from different backgrounds together and build a community.

After completing her Master's degree she contacted a local organic food shop who had produce to give away that otherwise would have been discarded. As a result once a week the group of students and Alumni now organise bi-weekly 'waste cooking' events, Küfa or kitchen-for-all, at Vorort Haus (Figure 5), often with thirty or more participants. Due to restrictions caused by the COVID-19 pandemic at present these are take-away events only, where students bring their own containers to take them home.



Figure 5: 'Waste cooking' at the Vorort Haus kitchen. Students and friends prepare food from produce donated by a local organic food shop. Donations are used to pay for the facilities such as water and electricity.

Another project with sustainability, ecology and community in mind is Jeanette Schmidt's 'Sauberkasten' project. Initially she was interested in exploring non-toxic ways of housekeeping and cleaning and began investigating traditional ways of domestic cleaning, so called household remedies.

In this process she conceived a 'toolbox' or 'cleaning box' containing six traditional ingredients that allow oneself to mix washing detergents, washing up liquids, window cleaners and other detergents.

The prototype involved soda, vinegar, soap, chestnuts and orange essence, together with recipes to mix particular detergents. After completing her degree project she founded the company 'Sauberkasten' together with a friend and – after winning an environmental prize – redesigned the box, which became quite a success, especially building a community of consumers interested in more ecological housekeeping and sharing their knowledge. In the meantime Sauberkasten have expanded and have been joined by two additional team members. Jeanette continued to do her masters with us, alongside her entrepreneurial challenges.



Figure 6: Sauberkasten, an integrated design Bachelor thesis project, encouraging consumers to mix their own housekeeping detergents from a few basic ingredients.

3.0 Summary and discussion

Above I discussed our efforts encompassing around 10 years, from realising that giving lectures was an outdated format, to students giving input to new ways of teaching and us publishing journal papers about our research together. From my perspective our teaching style influenced by Glanville, Banathy, Freire, Postman and Laloux fell on fertile ground in Dessau, which had been supported by our colleagues, namely Prof. Brigitte Hartwig. In my view it led to a palpable transformation of mindset and culture with visible changes on campus and in town.

The question is how large of an influence our teaching style and mindset contributed to this change. It began seriously in 2014-2015 with the realisation that students in the second semester disliked theory. There the mission became making theory seminars more engaging and interactive. Perhaps I am overestimating our influence

and the new generation of students simple are more engaged, idealistic and motivated? From Banathy's system thinking we know that systems change may take up to six years.

Perhaps it was both: The ground here was fertile and my theory seminars found a practical application in the studio projects around Social Design/Design for Social Innovation conducted by my colleague Brigitte Hartwig?

By employing community building styles of learning and teaching that empower our design students to seek self-efficacy and extend the reach of learning to design from the campus out into the commons. I described a corollary, from my own perspective, of how following principles adopted from systemic thinking, once some students had experienced self-efficacy and ownership over their own learning process, they began transforming their environment in view of supporting conditions for community building. In Noel's models for curricula (Noel, 2020) I would affirm that our model has elements of Noel's 'empowering design education' and '21st century skills education'. Perhaps some of the presented evidence is a post-rationalisation, trying to create a causal relationship from chance observations or what might have developed through external circumstances? However, the increasing number of social innovation and service design projects that engage in 'soft' areas such as ecology and sustainability, ecological literacy, health and nutrition, learning and teaching, I think, speaks for itself.

I think our approach is becoming highly relevant when we look at the new 'New European Bauhaus' funding scheme, initiated by the EU around the UN's SDG 17. The scheme calls for 'designers to save the world' and aims at bringing designers, artists and scientists together to create innovative solutions in making Europe more sustainable, 'greener' and transform into a circular economy. On one hand this will require participants that can collaborate well across disciplinary boundaries, but that also are able to lead and have well established social skills. Which also have a well established 'ethical compass' and know about and reflect their values and mindset. Perhaps our mindset shaped by Dessau's simple but flexible space of possibilities and that of staying a lifelong learner, what Terry Irwin, Gideon Kossoff and Cameron Tonkinwise (Irwin, 2015) describe in their Transition Design Framework as 'posture and mindset' is a good beginning.

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