2023

IMPACT on Creativity

Wettre, Andreas and Sevaldson, Birger

Relating Systems Thinking and Design
(RSD12) Symposium | October 6–20, 2023

IMPACT on Creativity

Andreas Wettre and Birger Sevaldson

Many accept and appreciate gigamapping as a method of understanding complexity, mixing systems thinking and design. Too often, we as teachers see that gigamapping is only used in this first phase of understanding. The method seems not to be utilised to its potential in the more creative process and throughout implementation. We are also challenging the idea that you need to understand first and then be creative about possible solutions.

Sevaldson argues that designing early is needed to ask what-if questions (Sevaldson, 2022). This is important to explore the system and how it might react. We think of this as a way of learning more about the system through design. Also, we have developed a creative process framework (Sevaldson, 2019) that is still in the making. However, we suggest that designing creatively, even at the beginning of a systems oriented design process, has its benefits.

KEYWORDS: systems oriented design, creative process, systems thinking through design.

RSD TOPICS: Learning & Education, Mapping & Modelling

IMP analysis

After some successful experiments, we have changed our way of teaching. We now get students to design early, very early, and then immediately use the Impact and Threshold Analyses (IMP analyses) (Sevaldson, 2016)on their intervention(s), and we have seen how this creates new insights to go back to the gigamap develop it further and even starting to do an embedded boundary discussion, develop their expert network and get a sensible direction of their project.

Intervention design

We ask our students to design an intervention very early, maybe only after 30 minutes of mapping. This is long before they feel they have mapped enough. We ask them for "any intervention; just challenge yourself to come up with an intervention."

Students spend 10–15 minutes designing—as a very first idea of potential intervention, not developed—and not likely to be a very good intervention, just a tool to get further, fast, and to radically change the way of thinking. We decouple the orthodoxy of first knowing and then planning. This sounds radical, even irresponsible. But we do this in the early sketch phase as a means to understand and explore and to introduce creativity as a central tool in understanding systems through systemic design.

With this rough intervention, we introduce the IMP analyses and let the students run through them. The analyses are all based on assumptions, with (almost) no facts. They look at the intervention through the different elements in the IMP analyses. Usually, this takes 30 minutes. The IMP analyses introduce organised criticality and reflection, which makes them think twice and change their ideas.

Observations

During the IMP analyses, we have observed creativity flourishing, directions being developed, and many of the unconscious unknowns being made conscious. This again creates energy back into the gigamap, with a more deliberate approach to the unknowns, more energetic mapping, and collaboration. Sometimes, this even creates more potential interventions that might be developed.

We find this a very useful way of moving back and forth in the double or triple diamond, enhancing both the ability to be aware of emerging ideas and the boundary discussions that occur as a natural consequence of this process. This is an important element of developing systems thinking.

We have tested this with master's students knowledgeable of SOD and gigamapping and are encouraged to explore the IMPACT on creativity idea further.

Indicative references

1. Birger Sevaldson, A. W. (2019). SOD Creative Process Framework. Retrieved from https://systemsorienteddesign.net/sod-creative-process/
2. Sevaldson, B. (2016). Impact and Threshold Analyses (IMP). Retrieved from https://systemsorienteddesign.net/evaluation-tools/
3. Sevaldson, B. (2022). *Designing Complexity: The Methodology and Practice of Systems Oriented Design*. Common Ground Research Networks.