An exercise in framing Health Systems appropriate to specific global health problems

The context

Within the Bachelor program Development and International Relations, Södertörn University provides a 15 ECT course on Global Health for second year students. The course is multidisciplinary and cover areas such as nutrition, epidemiology, health indicators, health politics and health systems. During the course the students are challenged with a task to write up a proposal for an intervention om a selected health problem in a specific country or region. The project work is a training exercise for future work within development aid organisations and is supposed to be a near a real world application as possible.

The course is dealing with a very complex reality and provide the students with various ways of understanding the problem. Yet, the teachers experience was that the student met this complexity in their project work with simplistic solutions, probably due to a lack of tools to deal with the complexity. The decision was made to try introducing tolls for systems thinking in the Health systems module.

Teaching about health systems

The course part on health systems is provided as an opportunity for students to orient themselves in the context where they will propose an intervention. The learning experience consist of 1) a lecture on health systems and systems thinking, 2) a series of eligible research articles on health systems, 3) a task to frame a system with boundaries, elements and interactions that would be relevant to the purpose of the project idea, and 4) finally a seminar where the students present their way of framing a system relevant to their intervention idea.

The lecture

The starting point for the lecture is a presentation of the WHO building blocks for health systems. The building blocks are contrasted to systems theories and approaches, both as a critique to WHO for using the idea of system in a superficial way, and as a way of providing a deeper problematization of the complexity of framing a health system. References are made to the way that Health systems are conceptualized in the eligible literature, which further problematizes the way health systems are conceptualized by the WHO.

One problem with the WHO building blocks are that they have been appropriated by large consultancy firms that sell their ideas on constructing health systems to governments all over the world. These approaches are often based on the so called Triple Aim model which, in different terminologies, talks about the general population health, the client experience of care and, maybe most important, the cost effectiveness of the system. The Triple Aims are clearly visible in the WHO framework and as such it is, nowadays the paradigm that governs system design. On a political scale, the Triple aim is conceived of as neo-liberal model with system designs that align with new public management ideas on driving the public services as if they were commercial enterprises. This has been criticized by health service staff union for not considering care-team wellbeing and/or the professional judgement of patient security enough. As a consequence a quadruple aim model has been proposed to safeguard the health workforce, which is one of the building blocks in the WHO Health System.

Alerting the students to the highly politicized nature of current thinking on Health Systems leads further to introduce the idea of system leverage points, indicating where in the system interventions can be made to change the functional outputs of the system. Based on Donella Meadows ideas, but simplified to the four areas, from lower to higher, of material stock and flows, the processes of changing feedbacks, the Design of goals and information flows and finally, the intent with mindsets and paradigms. In this idea, the leverage points at the lower are easier to change, but do not affect the system operations to any larger degree. Changing paradigms on the other hand may transform the system.

The lecture parts on system theory are constructed to provide the students with a toolbox to use in their own analysis of the system.

The task to frame a system for the proposed intervention

The students form groups of two to formulate a health intervention project at a geographic locality where the intervention is supposed to take place. The project is presented as a proposal to a funding body, in this case the template for project applications to the WHO Tropical Disease Research program is used. The project work includes a search process for information in scientific articles as well as in grey literature and on the websites of various health organizations and national authorities. Based on this search and on themes selected from the literature on health systems, the students are given the following task:

1. Make a list of actors that are in a position to influence the outcome of the project.
   The instructions suggest the students to categorize the actors, i.e. organizations, professional groups, non-human actors, etc
2. Make a list of steering documents important for the governance of the system
   Legal documents, policies, guidelines, scientific articles
3. Make a list of artifacts that may influence, such as items within the domains of ICT devices and networks, transport systems, water and sanitation.
4. Make drawings or create tables to explore possible links between the elements in the system.
5. Ponder where to set the boundaries - which elements are important enough to be included, which are less important. The students encouraged to simplify as much as possible without losing explanations to the functions of the system.
6. Ponder opportunities to change the system. The students are encouraged to use the concepts related to the leverage point approach, moving from material changes to changes of paradigms. They are made aware that changing paradigms may be a huge task, that may be necessary in some cases. In other cases, minor changes to material flows may do the trick. Here the students are provided an opportunity to train their judgment and making realistic assessments.

The seminar

After a week of work, the students present their findings in a seminar. Each group of two makes a 10-minute presentation. Each presentation is then discussed by the seminar group, first answering the questions “Does the system presentation make sense?”. Next the seminar group give comments on the system framing presented, suggesting additions or withdrawals, asking questions about choices made.

The lecturer’s role is to gear the discussions towards the work of framing systems. What was difficult?. How did you think when you came up with your final presentation? As an introduction to

the seminar discussions, the students are reminded that there are no right or wrong system framings, only framings that serve the purpose or intent of the framer. Hence, any comments made are supposed to facilitate the work of getting the system framing to better serve the purpose. The lecturer also comments on the presentations, particularly on important topics related to complexity and systems thinking that may assist the students to better understand how systems thinking is done. Interventions is also made to exemplify important concepts when opportunities arise in the presentations.

Results

This exercise on Health Systems has now been provided for two courses, spring 2021 and spring 2022. The first year was blocked by the pandemics and lecture as well as seminar was conducted on Zoom but in 2022 it was possible to conduct the seminar in site at campus. This mainly influenced the interaction between the students and the quality of the comments given by the peers. Being the second year, the instruction s also were a bit more stringent than the first year.

A general comment from the students was that it was a difficult and challenging exercise, but also fun and fruitful once they got a grasp of it. A weeks exercise to understand systems thinking was too short time. Some students would have wanted more time for the exercise, other suggested that there should be more specific training on systems thinking throughout the program. One comment was that the system exercise came to early in the project work, but on other hand, the commenting student realized that it had forced her to think more on the context where her group was proposing an intervention.

The range of complexity grasped in the presentations varies greatly. Some students mainly make lists, some adding obvious relations while others elaborate on the relations. Setting the boundaries seems to be the most difficult task for students, this is where many of them struggle. There are those who make simplifications on a higher level – talking about types of actors and types of relations rather than what they expect in the specific case. This may be partly explained by the timing of the exercise when the students not yet have gathered a more specific knowledge about the situation valid for their project idea. Some students stand out as they define relations with many actors in a way that really expose a possible function of the system. Such presentations are a goldmine for the learning process, as they make it possible for the lecturer to dig deeper and for other students to see the opportunities, they missed in their first attempt. Few of the students reach a level where they can identify possible leverage points that are specific enough, but many do make attempts to discuss at what systemic level it would be most fruitful to implement changes.

The students do reach a basic understanding of what systems thinking might be, some at a greater depth than others. What the exercise shows is that such a basic understanding can be achieved within a week of work. There are two opportunities to extend and amplify this experience, one would be to find a way of integrating systems thinking better throughout the course. The other would be to have similar exercises in various courses throughout the program, successively build the skills of thinking and visualizing systems.