Using Stakeholder Analysis in the Classroom

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A stakeholder analysis is one of the most valuable tools that can be used in the classroom to learn social-environmental synthesis with a case study approach. A stakeholder analysis is, simply put, an exercise designed to identify all relevant stakeholders on a given issue. This, of course, begs the question: What is a *stakeholder* in the first place? Definitions abound, but one of the simplest and clearest is provided by Checkland (1981), for whom a stakeholder is simply whoever "owns a problem". Think, for instance, about an environmental problem that affects a given community. Stakeholders, according to Checkland's definition, would be the citizens affected by the issue (but only if they identify the problem and decide to do something about it), the interest groups that are active in addressing the problem, policy makers and bureaucrats who care about the problem and seek solutions, research teams and/or institutions that study the problem, etc. Freeman (1994) also provides a broad definition of stakeholder as anyone with a vested interest in the problem. Interestingly, the broadness of these definitions make room for considering as stakeholders not only those individuals or organizations who are presently concerned by a problem, but also those that might become concerned in the future.

Identifying relevant stakeholders–if it's done correctly- is a great way of getting students to think about the problem itself in better detail, and promotes a more comprehensive view of the social and environmental variables that might trigger the problem. Through a stakeholder analysis, not only can students identify the stakeholders, but in the process of doing so they are likely to find out the stakeholders' motivations and policy-relevant views when dealing with the problem. Obtaining this type of information is likely to give students a better sense of the likelihood that the problem will be solved –or exacerbated. Some of the goals that both instructors and students must keep in mind in order to successfully conduct a stakeholder analysis are the following:

a) To identify the main stakeholders, sorting them into groups with a common vested interest
b) To understand the historical/cultural context in which the stakeholders operate
c) To understand the relationships between the competing interests of the stakeholder groups
d) If needed, to be able to prioritize the interests of myriad stakeholders, which might come in conflict with each other.

Reed et al (2009) describe in detail different types of methods to perform stakeholder analysis, depending on the rationale behind it, which might be to (a) simply identify the stakeholders with an interest on the topic (descriptive), (b) determine who should be included formally as stakeholder in decision-making processes (normative), or (c) understand how the behavior of stakeholders can be managed to achieve certain goals (instrumental). If the goal is to simply identify stakeholders, without paying much attention to how much they participate in decision-making processes or what their level of influence is, then one can use simple techniques to produce such information, such as collecting data from media sources or creating lists from archival analysis. But if the goal is to think more carefully about the relationships that take place among stakeholders, then the use of Social Network Analysis techniques can help uncover those relationships. This information can then be used by students to think about ways in which the "social architecture" underlying the problem at hand can be improved.

Stakeholder Analysis Use in a Case Study: [*Socio-Environmental Influences on Algal Blooms in the Western Lake Erie Basin*]

In the classroom, and depending on the amount of time available to cover the case study, a stakeholder analysis can be performed using a combination of the approaches outlined by Reed et al. For instance, Berardo teaches an Environmental and Natural Resources Policy class every semester at the School of Environment and Natural Resources (The Ohio State University), and as part of this class, the students spend 4 weeks applying a social-environmental synthesis approach to the study of yearly harmful algal blooms (HAB) in Lake Erie. Two of the 8 class periods are spend in creating a stakeholders analysis, with the first class period focusing on identification of stakeholders and the second one on relationships of potential conflict and cooperation among them. To identify stakeholders and their positions on the topic of HABs, students use a Rainbow Diagram (Chevalier and Buckles, 2008), as illustrated in Figure 1.

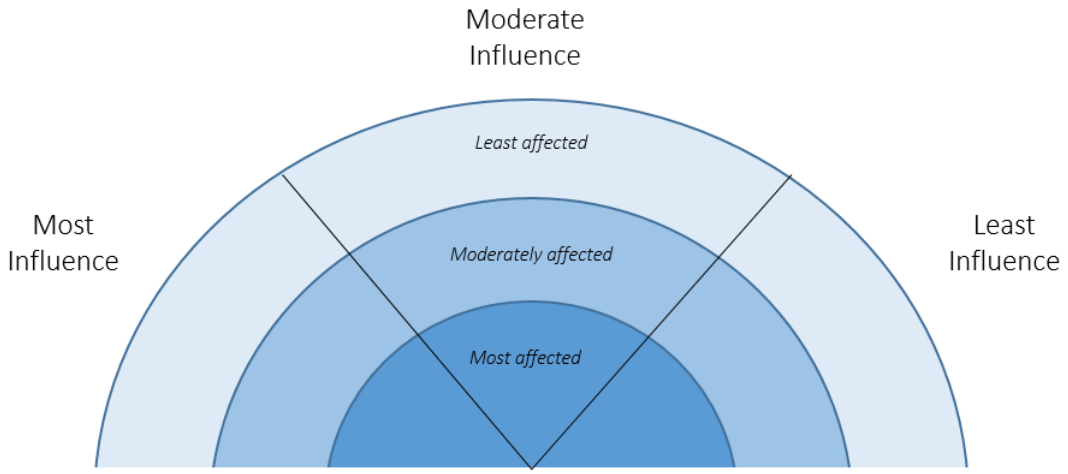

Figure 1. Rainbow Diagram (Chevalier and buckles 2008)

The rainbow diagram is a relatively simple way of identifying stakeholders and how they are affected by environmental problems. In the case of HABs, for example, students are given a set of articles about the blooms and asked to read them and identify the different stakeholders that are mentioned in the article. Then they are asked to place them in the rainbow diagram and discuss their placing decisions. In general, students identify a wide variety of stakeholders, including citizens concerned with water quality in the lake, farmers whose farming practices may affect water quality, state and local elected and appointed officials with the power to regulate water use practices, etc. Decisions on where to place actors tend to be more or less homogeneous. For instance, students tend to place citizens living along the shores of Lake Erie in the "least influence/most affected" cell, while farmers (who apply the fertilizer in their fields that may trigger algal blooms in the lake) tend to be placed in the "most influence/least affected", most of all because of the powerful lobbying actors that represent their interests. These categorizations are not completely homogeneous, of course. For instance, while some students place farmers in the "most influence" sector, others might consider them to have only "moderate influence" if they fail to notice the strong representation of farmers' interests by the local Farm Bureau. In any case, these disagreements spark class discussion about the capacity and interests of myriad stakeholders because students can be asked to defend their choices (or modify them based on the discussions they have). Discussions of historical/cultural contexts in which the stakeholders operate are also relevant. Not all stakeholders enter the negotiations on an even footing. Some come with historically generated disadvantages due to issues of race, class, gender, etc.

The second class period for the stakeholder analysis is used to refine what was accomplished in first period. Students are asked to perform a basic social network analysis by determining potential agreement and disagreement among the stakeholders that were identified previously. There are multiple tools to perform such analysis, but one of the simplest ones is Mental Modeler, which allows users to draw positive and negative relationships of different strengths among different actors.

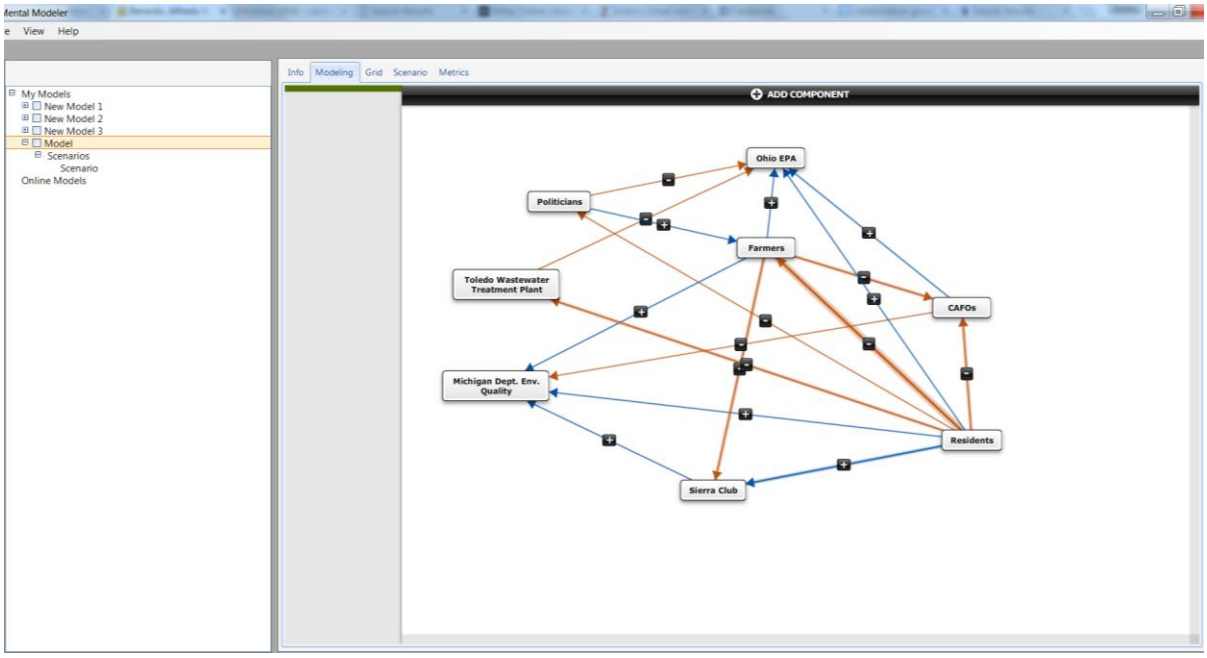

Figure 2. Example of Stakeholder Analysis in Mental Modeler.

One of the advantages of Mental Modeler is that it demands considerably less time to learn than other, more advanced software to perform social network analysis. This makes it an excellent tool for use in the classroom. Figure 2 contains a simplified version of a model of stakeholders relationships developed by students in the course. Red links symbolize disagreement on how to tackle the problem of HABs in Lake Erie, whereas blue links signal agreement. As students add "components" (stakeholders) in this screen, and draw lines among them, the software records the information and provides users with metrics allowing them to see who is more central in these networks, how many components or groups of actors exists (which is useful to determine whether the system is fragmented or not), etc.

It is important to note that this combination of techniques to perform a stakeholder analysis is by no means the only one that the instructor can use. There are indeed multiple ways of achieving the goal of conducting a thorough stakeholder analysis. Many of the case studies that readers can find in SESYNC's website, for instance, use role playing as a form of stakeholder analysis. To conduct role playing exercises, students may not necessarily be asked to identify the stakeholders themselves (although this may happen). Instead, the instructor may assign to students different types of stakeholders to portray in classroom simulations, and it is then up to the students to represent the positions and views of the stakeholders to the best of their ability. These exercises can be valuable for a number of reasons. First, in forcing the students to mimic the decision-making process of the stakeholders they represent, they are likely to enhance the students' understanding of the underlying causes of problems and the social or political obstacles to arriving at agreed-upon solutions. Second, role playing can also shed light on the difficulties of conducting instrumental stakeholder analysis, given than in many cases the behavior of certain stakeholders can hardly be managed with

a top-down approach where some authority figure determines who gets to participate in decision-making processes and who doesn't.

Despite the obvious advantages of conducting stakeholder analysis in the classroom, instructors also need to pay close attention to certain challenges that might arise when using this tool in the classroom. From our experience in teaching S-E synthesis with case studies, there are two challenges that present themselves often. The first one is budgeting enough time to conduct the analysis. Whether it's done individually or in groups, performing a stakeholder analysis is time consuming. In the example discussed above, creating a simple rainbow diagram with just a couple of media sources in the classroom takes as little as 30 minutes, and as much as one hour. Learning to use Mental Modeler can also be time-demanding, even if this tool is particularly easy to learn. The second challenge that we believe is common is the reluctance of some students to represent the positions of certain stakeholders. This usually happens when the student has a very strong negative opinion about the stakeholders and how their actions negatively affect the environment or lead to the problem that is being analyzed in class. We think that a way of minimizing this problem as much as possible is to spend some time explaining that the value of a stakeholder analysis lies on modeling how different positions are likely to affect relationships of cooperation or conflict that might help solving (or not) the problem at hand. Only a realistic portrayal of the different stakeholders' positions can render an accurate depiction of how decision-making processes are likely to unfold.

In closing, although a stakeholder analysis takes classroom time to develop and implement, we have found it very useful as a teaching tool. Stakeholders both affect and are affected by environmental problems, and so conducting a stakeholder analysis is the first step in understanding the complex forces that drive the social change necessary to solve such problems. The students come away with an improved sense of the potential difficulties in arriving at a solution that further the public good.

References

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