

## **ENGAGED RESEARCH CASE STUDY**

### **Dr Edward Zlotkowski**

Dr. Ann Smithson teaches chemistry at a public university in the northeast. Recently, in the context of a course on environmental chemistry, she decided to engage her students in a project to sample and analyze soil from a local playground. The playground in question is in a nearby town and was built primarily by community members using donated lumber. Dr. Smithson chose this project because she has become increasingly concerned about contaminants leaching into the soil from the chemicals used to treat the kinds of posts that support playground structures.

Before the spring semester started, Dr. Smithson wrote a letter to the town's selectmen to let them know about the project. She assured them the analysis would be done at times when the playground was not being used. When she received no response, she called town hall and described the project to someone in the Town Clerk's office. That person had little response except to say that she didn't think there would be a problem if no children were involved.

Dr. Smithson decided to conduct the project as planned, and, after a semester of sampling, analyzing and mapping, the class was able to pinpoint several places in the playground where the level of chemical contamination either reached or exceeded government guidelines for the substances in question. Students were proud of their work and were eager to share their findings with town officials. Dr. Smithson herself was so pleased with the quality of student learning and the research it produced, she immediately considered making playground soil analysis a regular feature of her environmental chemistry class.

Unfortunately, the semester ended before there was time to present the findings to the town. However, a few weeks into the summer, Dr. Smithson succeeded in making an appointment with one of the selectmen and brought him the results of the analysis. Having summarized the findings in the report, she suggested that some parts of the playground be put off limits as soon as possible, that several structures be replaced, and that the soil in less contaminated areas be regularly monitored.

It would be hard to describe how shocked and disappointed she was at the chilly reception she received. The selectman not only expressed skepticism regarding her findings and concerns but also seemed to take offence at the implication that the town would in any way endanger its children's health. The official assured her that such chemically treated lumber was the norm for playgrounds and that there had been no reported increase in illness among the town's children. He also seemed indirectly to question her motives, and kept asking why she chose to analyze the soil in his town's playground. Why hadn't she analyzed the soil at a playground "somewhere else"? The only 'concession' she could win from him was his agreeing to share the report with other "appropriate" officials.

Dr. Smithson is now far less enthusiastic about public engagement and is strongly disinclined to risk a similar experience with next year's class. If you were one of her faculty or student colleagues, and believed strongly in the potential of engaged research, how would you advise her to proceed next time? What could/should she do differently? Consider both the mechanics of partnering in general and the special opportunities afforded by partnering with a small town. How could such a partnership help develop specifically civic competencies?