

“The IUP Marcellus Shale Week: A Community and University Symposium”

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Final Report Narrative

Name of Project: “The Marcellus Shale Natural Gas Fields in Northern Appalachia: A Symposium”

Grant Period: February 1, 2010 – June 30, 2011

Grantee Name: Mark Berezansky Project Director: Jim Dougherty

Description of Project:

The benefits from the Marcellus Shale natural gas field are well known—jobs, energy, and economic gains for secondary business and industry. In order to inform the public about this development, IUP students participating in the ATP helped organize the “IUP Marcellus Shale Week: A Community and University Symposium” which explored the lesser-known aspects of Marcellus Shale, such as the historical, social-environmental, legal, political, and health issues related to gas extraction. The conference presented a balanced series of topics, with speakers and panelists from Indiana University of Pennsylvania, Duquesne University, and SUNY–Oneonta, plus University of Pittsburgh faculty, other regional scholars, state-elected and agency officials, corporate executives, and representatives from statewide environmental groups, as well as community members and students. In addition, the film *Gasland*, a Sundance award winning 2010 documentary, was screened on the IUP campus and in the local community. Following the film, a panel of people representing the gas industry, academia, and the community offer their assessment of the film and their perspectives on this new developing field of natural gas exploration and extraction. Representatives from the Indiana County PA League of Women Voters participated by facilitating the panel discussion.

Activities:

In connection with students and professors from two anthropology classes, students from the IUP Social and Cultural Change course (SOC 387) helped organize and participate in the symposium on the impact of the Marcellus shale industry on the region. They assisted in the design of the program, contacted presenters, helped organize logistics, coordinate travel and lodging arrangements for participants, and publicize the event to local and regional constituencies.

Project Outcomes:

Students summarized their work into individual final reports that were compiled into a master project report and a project poster that were presented at the ATP's December 2010 conference in Washington DC.

Problems Encountered:

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Program Continuation and Sustainability:

Internet links to newspaper and journal articles related to the industry and provide will be posted on the IUP Center for Northern Appalachian Studies website thereby enabling the Center to fulfill its role as a clearinghouse of information for topics and issues of major concern for residents of the region

Conclusions and Recommendations:

See the individual student reports that follow.

Attachments:

See the student produced “**Marcellus Shale**” power point.

For local coverage go to:

http://www.indianagazette.com/article_52d57d76-b632-54a0-8d3a-f4c68d340bf7.html

<http://www.iup.edu/page.aspx?id=100848>

<http://alleghenysc.org/?p=1982>

Amy Perkins

SOC 387 – Social and Cultural Change

Dr. Dougherty

Marcellus Shale Week Review

Key Note Speaker

On Thursday, November 4th, 2010 at 7:00pm in Eberly Auditorium at Indiana University of Pennsylvania, Dr. Ron Bishop, a professor of the Department of Chemistry of the University of New York- Oneonta, presented as well as educated on the topic of “ The Good, The Bad, The Ugly: PA In The National Context”. The program started with the wonderful musical talents of the folk band Joe’s Legacy :The Joe Yeslovich Family Fiddlers, featuring Dr. Carl Rahkonen, ethnomusicologist, IUP professor and music librarian The band welcomed the audience in with traditional folk music. It was an interesting and fun way to start the program.

Dr. Bishop used his scientific knowledge to inform the audience on why Marcellus Shale is such an issue right now. He explained why this is a social issue and backed it up with his chemical knowledge as well. He explained it in stages of six different major problems.

The first problem with the Marcellus Shale is that a deep well has to be drilled and the cutting has to be brought to the surface. This uses drilling mud, which usually contains Barium Sulfate. It is so dense that the rock chips and floats in it. The issue with this is that Barium Sulfate reacts with radium in the shale to form an insoluble, radioactive scale; this coats the well and everything in it.

The second problem with the Marcellus Shale is that the shale layer is only a few hundred feet thick. When drilling vertically down to the shale, then horizontally through it. This is a major issue because each drilling uses vast amounts of water. It has been said that three to five million gallons of

water are used for each well drilled. That is a huge waste of water. The amounts of water for a vertical well are equivalent to one car amount of water, for a horizontal well the water uses is an equivalent to fifty cars. That is fifty times greater than an average well project. These wells also waste a lot of land. Multiple horizontal wells from a single drilling pad could cover two hundred to four hundred acres.

The third problem is that the Marcellus Shale wells pass through aquifers used for drinking water. This causes the well in layers of concrete and steel. The issue with this problem is that concrete is hard but not flexible. Cracks form over time and in current practice, major well sections are not sealed. Dr. Bishop stated “ there are twelve million abandoned gas wells in America. These wells are not sealed and because of that ,the wells are leaking”.

Natural gas not flowing from the well very well is the fourth problem with these wells. This creates a need for hydrofracturing, also known as “fracking” The shale rocks crack unpredictably. These cracks can extend up to half a mile. When hydrofracturing, the well has to be cracked to let the gas flow. This is an issue because the cracking lets the gasses out.

Chemicals cause huge problems, which is the main issue of the fifth problem. Water causes the well to swell up. This is bad because of Biocides, surfactants, flocculants, corrosion, inhibitors, prop pants, etc. These chemicals also get into the water systems. It is said that nearly three hundred different chemicals are used. More than three fourths of these chemicals that are being uses are health hazards. From these chemicals, health hazards such as respiratory disease, endocrine disease, infertility and birth defects, kidney, heart, liver, and cancer.

And finally, the last issue that was touched on was that there are always going to be accidents. Accidents happen. Values erode and break down, pit liners tear, pits overflow, tanks leak, and liquids are spilled. Roads will be damaged as well. The response to this is just to watch out. Accidents happen, and eventually they may be fixed.

All in all Dr. Bishop's presentation was very informative and extremely educational. He was able to break down the issues and problems in a way that were easily understood. He also raised awareness by informing our community on the issues that are happening right now in our own county. It was an enjoyable presentation and many individuals left the symposium that night with more knowledge about Marcellus Shale.

Charles Gray

December 15, 2010

Dr. Dougherty

Social and Cultural Change

Group Project Report

I thought the Marcellus Shale was an interesting project to conduct research on. I didn't know as much as Dr. Kruckman and Dr. Dougherty but I had some knowledge about it. The Marcellus shale is located in New York and extends throughout much of the Appalachian Basin. The shale contains largely untapped natural gas reserves and its proximity to high demand along the East Coast markets makes it a desirable target for energy development. The natural gas is extracted through hydraulic fracturing for releasing gas to surface. Everybody wants to get their hand on it because of the financial stability or wealth as a outcome. This gas is expected to create more jobs, increasing employment possibilities. It also raises environmental concerns. As a result of drilling, the water has been contaminated, killing animals making tap water unsafe for drinking.

I got involved with the symposium and my job was to stand at the door in Eberly and hand out flyers to people walking through the auditorium. After that for a few minutes I sat down and waited for high school teachers to fill out forms for credit, asking them to donate money. That night also I moved to another table to get people to sign petitions against oil drilling because it's affecting environmental. The following I volunteered again to sit at a table to hand out pamphlets to people coming the Ohio room for a Marcellus shale discussion.

The To promote and get the news out there about the Marcellus shale my group were in charge of posting it on the World Wide Web. We were to get as much information about the shale as possible to educate people about it. I went on the popular and most convenient search engine; Google for images of the shale. After finding the right picture I then posted it on face book and give the people brief description of the Marcellus shale and provided a link for them to follow. Along with that I also posted a video from YouTube titled “PA Gas Rush” on my page so that whoever came on my face book page would just watch. At the end of every week depending on the discussion in class I would update it as a status and they were only a few sentences. As a result people liked the statuses and images, got interested so they attended the viewing of the movie “Gas land,” and also followed the link.

I thought the project was an interesting experience because I got involved and was a part of something I only read about in the Pittsburgh newspapers. It was meaningful because in the sense that it affects all of us, environmentally and economically. I agree with the project because some people are clueless to something this big and so we need to get the word out via media for them to know about what’s going with the Marcellus shale. I thought me and my committees work contributed to social change in Indiana because we got the word out about it and people were informed.

Ashley O'Malley

Soc 387

12/9/10

I really did not have any familiarity with Marcellus Shale until I entered the Soc 387 class. I was not familiar with the project at all; therefore this class has taught me a significant amount of relevant information. Our Marcellus Shale group primarily focused on the media and publicity. We came together as a united group to raise awareness about the effects of the Marcellus Shale drilling on our land, animals, individuals, and society in general. Unfortunately, many individuals are not aware of the everlasting negative effects that this type of drilling could have on their community. We felt that it was our immediate responsibility to use the media and internet to relay this information to the people of our community as well as our society as a whole.

As a part of my group, I took part in many significant activities that I felt were relevant to the goal of our immediate group. I made many facebook statuses alarming the facebook community of the negative effects that Marcellus Shale is having on our land. I also made facebook statuses informing students of the specific days and times of the symposium. I posted links on facebook to you tube videos, specifically the HBO video, in order to urge individuals to check out the link, therefore raising their awareness to the detrimental effects of the drilling. I also posted various alerts on Twitter informing individuals of the dates of the symposium and stating the effects of the drilling. I wrote four blogs regarding Marcellus Shale in general and the afterthoughts of the Marcellus Shale symposium where individuals were encouraged to verbalize their thoughts and opinions about the symposium and Marcellus Shale themselves. Overall, I feel

that I helped to raise awareness of Marcellus Shale, therefore altering the opinions that one may have about the project.

Our group felt that we had a significantly positive outcome regarding the work that we did for Marcellus Shale. It was interesting to note how many of my friends were completely unaware of the project. If they were aware of it they seemed to see the project in a positive light until I explained to them some of the devastating effects that it was causing to our land, animals, and society. Our group caused many people to attend the symposium which they never would have attended if they were not made aware of the event from facebook and twitter. We also even had some friends continue their interest in Marcellus Shale and are making an effort to take part in the stand against the project. I feel that it is not difficult to convince individuals to take a stand against Marcellus Shale. It simply takes informing the public on exactly what this type of drilling is doing to our community.

I felt that this assignment was extremely beneficial for various reasons including the fact that it benefits and helps our community. I really enjoyed our group assignment simply because it allowed us to use technology and the media in order to spread the word about an extremely valuable occurrence in the world today. I feel that by using technology, one can reach out to so many individuals and raise awareness of such a vital situation. On facebook alone, I have almost 2,000 friends from all over Pennsylvania, therefore the internet is so much more accommodating in getting information out to a wide variety of people rather than simply passing around flyers in one solitary community or university. I feel that there are so many assigned college projects that are insignificant or irrelevant to anything that is occurring in the world today, therefore completing a project that can benefit society was truly rewarding. I completely agreed with all of the aspects of the Marcellus Shale project, due to the fact that it was taking a stand to save our

land, animals, and civilization. The project focused on informing the students about the Marcellus Shale and what destructive effects it had on the community and then allowed the students to use the knowledge they gained to spread that information to others. I feel that it taught many lessons regarding social change, because it allowed the students to practice ways in which to bring about social change. It proved to students that it only takes one individual to make a difference regardless of the topic that one may be focusing on. I am one single person, and I brought about twenty individuals to that symposium who would not have attended if it were not for myself. That exemplifies to students the type of change and effect that one person can have on society which is much more beneficial than simply reading from a text book about the many social changes that have already been made in the world.

As mentioned earlier, there were many valuable lessons that I learned from this particular project. I learned the level of effect that one individual can have on society alone. I also learned the significance of social networking and the media to gain awareness to a broad variety of individuals. I also discovered how much easier it is to raise understanding through the internet rather than by hand or other old fashioned ways of advertising. The biggest lesson that I discovered through this project was the public's eagerness to take a stand and fight for their community. I once believed that many individuals simply did not have the time or energy to take part in positive projects for the community, but now I feel that it is simply a lack of knowledge or understanding of what is actually occurring right in front of their very eyes. Regardless of how detrimental the Marcellus Shale drilling actually was, the media refused to expose the negative effects to the community, therefore they really had no recognition of what was actually occurring. If people are not made aware of what is happening or the ways in which they can be of assistance, they usually will participate in an effort to help the cause.

I feel that our group's dedication and hard work in this project has been extremely beneficial to the social change in our community. In order for social change to occur, there needs to be individuals who take a stand to make that change happen. In our case, it was our group who stood up to raise awareness of the everlasting effects of Marcellus Shale. As mentioned earlier, many of the reasons that something occurs have to do with the fact that people are not aware of what is occurring. It takes a large amount of hard work and dedication to get the word out about the problem to as many individuals as possible. The more people that any social movement has on their side, the better off one will be in the long run. The main steps to causing a change to occur are gaining awareness and then convincing the public why they should believe in your cause enough to take a stand with you. The work that I did for the Marcellus Shale project and the positive results that I found from the project caused myself as well as many of my friends to truly believe that one can make that change happen. My positive results in this project demonstrated to myself and my friends the power that any one individual can have in any aspect of change that they wish to pursue.

The Marcellus Shale industry would like to promote the amount of jobs and economic growth that one can gain from participating in the drilling or offering your land for the drilling to occur. Unfortunately, the Marcellus Shale industry forgets to alarm the public that this drilling has resulted in the destruction of trees, animals, and land. (Debunking Gas Industry Myths 2010) In some counties, the water is no longer appropriate to drink. (Debunking Gas Indust Myths 2010) It has also been stated by the Marcellus Shale industry that drilling of natural gas will energize Pennsylvania and reduce our reliance for foreign oil. (Debunking Gas Industry Myths 2010) Our findings have come to prove that these companies are advertising their leases and companies to China, Korea, Japan, India, Norway, Germany and England. (Debunking Gas

Industry Myths 2010) This can most definitely contribute to economic development due to the fact that it would actually hurt Pennsylvania financially to drill for the gas. We will be spending more money to finance the cost of drilling, yet our state or communities will be making no profit on the oil, therefore we personally will not experience any economic gain. Our findings also demonstrated that costs connected to health effects ensuing from contaminated air and water and ecological onslaught will far overshadow any reimbursements from this industry. (Debunking Gas Industry Myths 2010) Once again, this will increase the development of social justice and financial stability due to the fact that people will save themselves from health care dept resulting from contaminated water and air. Overall, I feel that the Marcellus Shale project has helped to raise awareness to students as well as many other individuals in our community, and it was an absolute success for everyone involved in the project. I am extremely grateful that I was able to take part in this assignment, and I am very happy with the success that we experienced.

Works Cited

(2010). *Debunking Gas Industry Myths*. Retrieved from <http://www.marcellusprotest.org/myths>

Amy Perkins

SOC 387 – Social and Cultural Change

Dr. Dougherty

Marcellus Shale Report

Marcellus Shale is a unit formation of rock that is found in eastern North America. It also extends throughout the Appalachian region. It was named from a city called Marcellus, New York. The shale contains largely untapped natural gas reserves, and its proximity to the high-demand markets along the East Coast of the United States make it an attractive target for energy development. Before entering Dr. Dougherty's Social Change class, I knew absolutely nothing about this topic. I did not know that it was harming individuals and our environment. I was not educated on it at all.

By attending the IUP Marcellus Shale Week Symposium I learned a lot more. After being more educated about this issue by watching the film *Gasland* and listening to different speakers, I was able to see how this issue could be considered a social change issue. After watching the film *Gasland*, my heart went out to the people who were having difficulties with the wells going in. These huge companies are taking advantage of people. They are being paid a lot of money to have a well put on their property. But they are not reaping the benefits because soon after these wells go in, homeowner's water begins to be contaminated. Chemicals are being released into the water systems and it is a very dangerous problem. Some homeowner's in the film could even light their faucet water on fire because of these chemicals.

I was excited to be given the chance to be personally involved with this project. My group focused on trying to get awareness out to the community. We posted up flyers in the community on Philadelphia Street, in restaurants, and in businesses, as well as around the town of Indiana, Pennsylvania in order to spread awareness of the symposium. In our group we were able to inform the community

about our interesting and educational IUP Marcellus Shale Week Symposium held at Indiana University of Pennsylvania.

I had a lot of involvement in this project. Along with informing the community of Indiana Pennsylvania, I wrote a review of the key note speaker, Ron Bishop from Thursday of the symposium, and I also accompanied Dr. Dougherty along with nine other IUP students to Washington D.C. to present our project at the Appalachian Teaching Project. By writing the review I was able to not only educate myself more from listening to the presentation, I was able to add to Dr. Dougherty's records of the event. While in Washington D.C. I was able to present our findings along side my fellow IUP students. We were able to attend the Appalachian Teaching Project with fourteen other colleges and universities. We presented in front of those other colleges and universities as well as answered the questions they had presented towards us. Being in Washington D.C. and presenting on behalf of our class was an amazing opportunity. Not only did our group inform other students about the hazards and concerns about Marcellus Shale, we were also given the opportunity to learn about other issues and problems that are happening now in the Appalachian region.

I feel that this was a very meaningful assignment. This is a huge issue that is happening right now that many individuals are not educated on. I am extremely glad that I was given the chance to learn about this issue in Dr. Dougherty's Social and Cultural Change class. I agree with the need to raise awareness. I feel that it is wrong that so many individuals have had problems with their water because of this. There should be more education on this issue so that people are not taken advantage of because of their lack of knowledge. I disagree with these gas companies that are drilling all of these wells. I feel that it is unnecessary for there to be so many. I feel that this should all stop. It would be beneficial to our environment as well as our society and its people if these drillings would stop.

I learned a lot from this project. Most importantly I learned about Marcellus Shale. Like I had stated before I knew nothing about Marcellus Shale before this semester began. I was able to be educated

on issues that the shale is creating. Along with learning what it was and how it was effecting our society, I was able to learn about the health issues and water usage. The amount of water that is used to fracture these wells blows my mind. It is unnecessary and unneeded.

My work and my committee's work can contribute to social change issues related to our local area by continuing to raise awareness on this controversial topic. It would be very valuable to get this information out to the individuals in our area who are suffering from this. It would also be valuable to get information to individuals before the sign off that they can have a well drilled on their property. We need to educate individuals about what they are getting themselves into.

Our findings throughout this project could contribute to the development of economic sustainability and social justice in our area for the present and for the future again by simply educating our society. When we held our symposium, we were able to inform many of the individuals in our area about his issue. But, what about those who did not know about our symposium or those individuals who were not able to come? Now that we have educated ourselves, we need to spread the word. This could be done by possibly mailing informational packets to individuals who are in the region or the drillings, or by making a website, or simply doing a series of mass emails. The word about these issues needs to get out into the public. It needs to be accessible for everyone to be educated on it. Now that we are educated, it is our duty to spread the word. We can make this change happen if we work together. A social change cannot happen without a society wanting it to happen.

Michael Santiago

Sociology 387

December 13, 2010

Marcellus Shale Report

Prior to taking this class and conducting research on Marcellus Shale I was unaware of its existence. I found this surprising because of its impact it could have on the region now and for generations to come. During the Marcellus Shale symposium many of my perspectives on social change were reinforced. I have always held the belief that social change starts from people organizing at a grass roots level to combat, inform, and discuss issues that can be detrimental to a society. I believe that this was accomplished through the Marcellus Shale symposium. I found many aspects of the symposium to be very engaging. I found the history of History of Resource Extraction in Northern Appalachia to be especially interesting. I was unaware of the degree to which resources were extracted from the region and the effects it had on the environment. I believe that the history of coal extraction in Pennsylvania draws strong comparisons with what is happening Marcellus Shale and the natural gas companies today.

I participated in the Media/Publicity Committee for the greater Indiana community. Our group's main focus was trying to inform members of the community about the symposium and its lasting importance on the area. We paid attention to informing residents who would not know the event times, dates, or activities. As part of my group I made a Marcellus Shale Symposium poster, which detailed the time, date and location of the event. Once the poster was made I thought of quality places to put them. I also tried to think of locations that were frequented by community residents more than college students. I

also tried to distribute and place more posters around the community once the symposium neared. During the symposium I took down information on the History of resource extraction in Northern Appalachia, which I later made into a report. I also went on to help present our classes findings to the Appalachian Teaching Project in Washington DC.

I believe my work and the work of my classmates yielded many outcomes. I believe that through publicizing the symposium through word of mouth and posters more people were made aware of the event. I believe this also led to the turnout in the number of people at the different functions at the symposium. Placing poster information in unconventional locations such as Laundromats and locations heavy with community residents I feel helped spread the word. Presenting information about Marcellus Shale to the Appalachian Teaching Project I feel had a positive outcome. It seemed as if many people at the conference were unaware of Marcellus and its impacts on the environment. By informing more people about the hazards of Marcellus Shale more people may be inclined to act.

I believe that this was a meaningful project. Given the gravity of Marcellus Shale and the impact on people within the region I believe that informing them is very important. With conducting this symposium more people are educated on Marcellus Shale and its impacts on the environment. The project gave people information that they would not normally have heard, residents from as far as Ohio and New York attended because there was no information about Marcellus Shale where they were located. I agree with all aspects of this project and feel that it has done important work for the region. This project has also taught me a great deal. Before the start of this class I had no information on Marcellus Shale or what were the impacts of it. Through this project I have learned a great deal about Shale and its impact on the region. I also learned about different approaches to instituting social change. The Marcellus Shale symposium was the first symposium I have attended and the Appalachian Teaching Conference was the first formal conference I have ever attended. Attending these functions gave me insight as to how social change is started and discussed. Our work in class has served to help educate people within the region to many aspects of Marcellus Shale. The information provided to them will help

them make more informed decisions and more informed action in their handling of Marcellus Shale. Our findings could contribute to residents not allowing Marcellus Shale drilling on their property, which could contribute to environmental sustainability. By not allowing drilling residents would also save themselves from the many health hazards that Marcellus Shale poses. This would ultimately benefit residents and future generations by providing a safer environment for living.

Nicholas Townsend

Professor Jim Dougherty

SOC 387

9 December 2010

IUP Marcellus Shale Week Symposium Report

Prior to conducting my own research as well as the information I learned upon taking this course I knew absolutely nothing about Marcellus Shale drilling. I did not know where the drilling was taking place, who was behind it, what resource was being drilled for or the effects that it has on our environment or local economy. I was totally ignorant to the entire subject three months ago but now feel I have a rather solid understanding of the topic.

All in all, I thought the information presented at the symposium was largely a success. On the first day of the symposium I went to the HUB to help pass out information at 8 in the morning and even at that point there was a rather decent showing of people. Also, I was struck by the variety of people that were present. People younger than me, people older than me, men in suits, girls with blue hair and everyone in between. This set the tone for the rest of the week was a microcosm in terms of who cares about this particular subject and the answer to that is a little bit of everyone whether they be young, old, rich or poor.

My group and I focused on spreading the word about the “IUP Marcellus Shale Week Symposium” by using the Internet as a tool in which we could reach a large number of people in a rather short period of time by using media outlets and social networks such as Facebook and Twitter. As part of my group I began in early October to post “tweets” (Twitter posts) as well as Facebook posts providing basic information about the symposium such as times and locations. Also, I created a Facebook group that I encouraged my fellow group members and peers to join

to share any information and ideas they found vital to share with the rest of the class.

Furthermore, I created an “event” on Facebook that included such information as a background to Marcellus Shale drilling, the point of the symposium as well as dates, times and descriptions of any and all presentations given during the three day event. Lastly, I scanned a *Gasland* poster which we received in class and created a ‘.jpg’ file that could be posted anywhere on the web. I sent this image to my professor and fellow group members which we then made as our default picture on Facebook for our friends and the rest of Facebook to see.

For the most part I believe doing the aforementioned activities was successful in getting the word out online. The Facebook group did not develop as I had hoped due largely to time constraints but will serve as an idea that may be implemented in the future if Dr. Dougherty has a similar activity. The Facebook group was the meat and potatoes of our group. Again, due to time constraints awareness of the group to my fellow peers wasn’t as widespread as I’d hoped. Yet, after all of this 70 or so people online posted that they would be coming to the symposium, most of which I didn’t even know personally. This is also a tool I strongly suggest implementing to future groups in Dr. Dougherty’s courses. My Twitter posts, Facebook posts and the poster that I placed on my Facebook were all acknowledged by both friends and family at some point during the semester so I know that they were successful to some degree in spreading the word about both Marcellus Shale drilling as well as the symposium.

I thought our group was rather effective in doing our part to spread public awareness about natural gas drilling, the symposium and even the showing of *Gasland* at the local theater. While there were things I would have liked to include in our work such as a YouTube video, for the most part I am very happy with the work that we accomplished. I believe the assignment was meaningful because it not only forced me to learn a lot about something I knew nothing about in

terms of the drilling itself, but it also taught me how to use the Internet as a tool to reach hundreds of thousands of people, including complete strangers, to spread the word about a good cause. For this reason, I completely agree with doing this project and would do it again in a second.

Again, as far as what I learned by doing this project, I learned a lot about Marcellus Shale drilling as well as using the Internet as an ally to create awareness. In terms of creating social change in the local area, the Internet is the first place I believe most people would go in today's world. In my opinion, we have the strongest outreach tool known to man to reach others in our community by using social media outlets such as Twitter and Facebook to create public awareness about any topic we see fit to promote.

While our committee didn't find any information that would be considered ground breaking or earth shattering (as we were not part of the research committee but rather the "messenger") this does not mean that my group cannot have an impact on future generations. By posting any vital information on the web or doing something as simple as posting information to our Facebook or any other social media outlet we are at least creating public awareness. Even if one of 1,000,000 people take the time to Google the term 'Marcellus Shale' and learn about it progress is being made.

Sarah Beth Smith

12/10/10

IUP MSWS

Prior to learning the facts of what Marcellus Shale drilling is, and then making inquiries about how it could affect our environmental, political, legal, social and health issues, I did not know one thing about it. I did not know what Marcellus Shale was until the first day of class, simply because I have never heard anyone talk about it until then.

My group was assigned the task of advertising the “IUP Marcellus Shale Week Symposium” (MSWS) on-campus. We accomplished this mission both physically and electronically, with our main goal being to educate primarily IUP’s students and faculty about natural gas drilling. Another group member created a flyer with the dates, times, and locations of the MSWS; I posted lots of these all over campus. I also e-mailed all of the IUP faculty members in the departments of Sociology, Anthropology, Safety Sciences, Geography, Philosophy, and Political Science vouchers that they could give to their students to get signed if they attended one of the few days of presentations concerning Marcellus Shale. I also attended Indiana Theater’s showing of Gasland; before it started, I stood by the entrance to give vouchers to students, to hand out brochures of the symposium, and to encourage the audience to take pencils and papers to ask panelists questions following the showing of the movie. Additionally, I e-mailed campus-event@iup.edu the dates, times, and locations of the MSWS, and referred those who wanted to know details to the IUP symposium’s website.

With the help of myself and many others, I think of IUP MSWS to be a success. Not only did I receive many e-mails from people asking for more information, but I also saw many students bring vouchers to the showing of Gasland, vouchers that I had sent to the professors.

Our roles as advertisers of the MSWS were vital to making the symposium successfully teach people about this issue. Certainly, it is not difficult to recruit those who are interested in learning about a local issue that may soon affect them or their family one day, but first they must know of when and where to be if they wish to get more information. That was our job; give them the information they need to be there if they wish to learn more after a very brief one-sentence summary of what it was about. The aim of this symposium was to inform the public of what gas drilling is, and to advocate that there may be possibilities of the drilling that is negatively affecting the environment and the public that come in relatively close contact with the drill sites.

If it is desired for as much as the population as possible to have heard about what information is being advertised, it is important to advocate in many different ways. Depending on how much of a populace is trying to be reached determines how much money and time you are going to need to spend. For example, we had initially wanted to contact The Penn to advertise the symposium's information, but it would have cost more money than we were willing to offer. I was also hoping to be able to put a video or at least, an advertisement on IUPTV. I was supposed to be filmed talking about it by another group member, but I don't know what happened to her. I don't have enough, or any, experience, for that matter, in making a video, and I was not about to attempt it alone. Though we did have a couple hindrances, we still made it work by utilizing all the other ways to advocate events on a college campus.

IUP Marcellus Shale Week Symposium
Sasha Myers

Before conducting my research for the Marcellus Shale project I had not known anything about the subject. I had heard some advertisements on my hometown radio station for job fairs that would train people for the Marcellus Shale drilling but I usually just quit listening to them because I had no clue as to what they were talking about. Once I started the class and we began to talk about the topic of Marcellus Shale it occurred to me that it was a big topic in my hometown and the surrounding areas. It was a great surprise to me how close the actual drilling is to my house and I never realized how much this is affecting my own life.

I felt that the symposium was a great thing because it educated the population on the harmful effects of the Marcellus Shale drilling project. Many people are unaware of what is going on right around them and the damage that can be caused by this. Just educated the population so that they are aware of the Marcellus Shale projects and drilling is causing social change. People can now realize what is going on and they can stand up for their views and try to help bring an end to the harmful drilling.

My group was the research committee. For the symposium we gathered articles on Marcellus Shale. We researched many newspapers and compiled their articles that pertained to anything having to do with Marcellus Shale. I myself researched the Scranton newspaper and found many articles that pertained to Marcellus Shale. This effects the Scranton area greatly and there is a lot or reporting of the topic for the area. I feel that the people in the Scranton area should be well educated on the risks and harmful outcomes if the drilling persists. I spent a few days researching the different newspapers I was assigned and created a list of the articles that I found. I feel that now people can use this list to find the articles themselves and to educate

themselves further on the topic of Marcellus Shale. They can begin to realize how much of Pennsylvania is being harmed by this discovery of Marcellus Shale.

I felt that my part of the project was meaningful and that as a whole the work of my group was meaningful. We gathered the information and now people can see how far this stretches across the state and area. They can see how it is affecting everyone in the state and it can show what is happening everywhere else. I agree with the project because I believe that everyone should be educated on this topic and realize what is occurring because of this drilling that is taking place throughout the state.

I learned a lot from this project, mostly I learned exactly what Marcellus Shale actually is and now can use this knowledge to educate others on how negative this is for our society. I not only was gathering information to educate others but I was also educating myself along the way. I now know what harmful affects the Marcellus Shale drilling can bring upon a community and nature.

My committee's work could contribute to social change issues on the local area by educated people and they can look up the articles and educate themselves on the topic of Marcellus Shale. They can begin to see how this will affect their lives if the drilling continues and if the drilling comes to their area because they can read about the effects that it is having on all the other areas where it is currently taking place. These people can try to stop the drilling from happening in their area if it hasn't already begun there.

If people try to protest the Marcellus Shale drilling now it will stop it in the future and therefore future generations will not be harmed by the effects of the drilling, land will not be damaged by the trucks, or the drilling itself. Positive outcomes will occur if people try to stop the Marcellus Shale drilling from progressing.

IUP Marcellus Shale Week: A Community and University Symposium

The gains from natural gas from Marcellus Shale are well known—jobs, energy, economic gains from business and industry. A three day symposium explores the lesser known aspects such as historical, social-environmental, legal, political and health issues related to gas extraction.

IUP's HUB & Eberly Aud. Nov. 3rd & 4th
Indiana Theater Evening Nov. 5th

Please visit
WWW.IUPShaleWeek.com

For an itinerary of events.

Amanda Smith

Sociology 387

Marcellus Shale Report

On the first day of class Dr. Dougherty asked his students: “how many people know what Marcellus Shale is?” No one raised their hands. As I sat back in my seat that day, I became more and more intrigued by what our professor was saying. I couldn’t believe that this was going on in my back yard. As I sat there, I thought back to my home town; I had been seeing more and more of these tall structures being built. I had no idea why there were many acres of farm land being cleared out nor did it ever occur to me, to ever ask questions. To my surprise, that first day of class, my unasked questions, were indeed answered. That day, I was ready for the rest of the semester.

Prior to this class, I had no knowledge of the Marcellus Shale industry, let alone interest in hydraulic fracturing, natural gas, shale rock, and environmental outcomes in general. As bad as this sounds, I think a lot of people do not care because they simply do not know. This was my case. At first, I was both interested to learn more, and frightened at the same time. The whole idea of Marcellus Shale seemed foreign to me but still equally familiar because I knew this is what I was seeing back at home.

Dr. Dougherty split the class into groups once announcing that we would help to host a symposium for both the university and community. I was placed in the campus media group. My job was to help spread the word of our upcoming event. My partner, Sarah and I, brainstormed ideas for posters. Back at home, I took some pictures to include in the project as well. After the posters were distributed, all over campus, we made effort to contact both IUP radio, and IUP TV but acquired a failed outcome, unfortunately. We did however, meet with the campus newspaper

and advertised our efforts through an article that many students and faculty read. In addition to this, I typed a detailed itinerary of events, times and speakers to given out to different departments such as: Geoscience, Geography, Safety Science, Political Science and many others.

It was great to walk around campus and see the posters I created hanging on different bulletin boards in many class buildings. Everyone put forth great effort in supporting the Marcellus Shale Symposium. I think that being broken up into these small groups helped get all the jobs done in a big way. Collectively, we had posters on campus, a website, a facebook page, and signs in the community as well as a marquis in town.

I personally learned a lot from the project. Along with learning about Marcellus Shale as a whole, but I saw first hand just how much planning and work goes into a project this large. It was fun creating posters and sitting down with the newspaper, and if I could, would be willing to do it all over again.

Overall, the symposium brought to light the harsh reality of what the natural gas companies are trying to hide. I think that it is so important to talk about what is happening, especially, in our area. I watched for almost a year, gas companies coming into our area to drill, and I had no clue what was going on. I dragged all my friends to our showing of Gasland and sat back and smiled as I watched their astonished faces. This is what the symposium did. It brought light to what has been in the dark for years. We can only hope that the interest will grow and people will spread the word about hydraulic fracturing, Marcellus Shale and its possible negative effects. Together, we can stand and take a step forward, even if it's just spreading the word. We are the tools for change.

IUP MARCELLUS SHALE WEEK



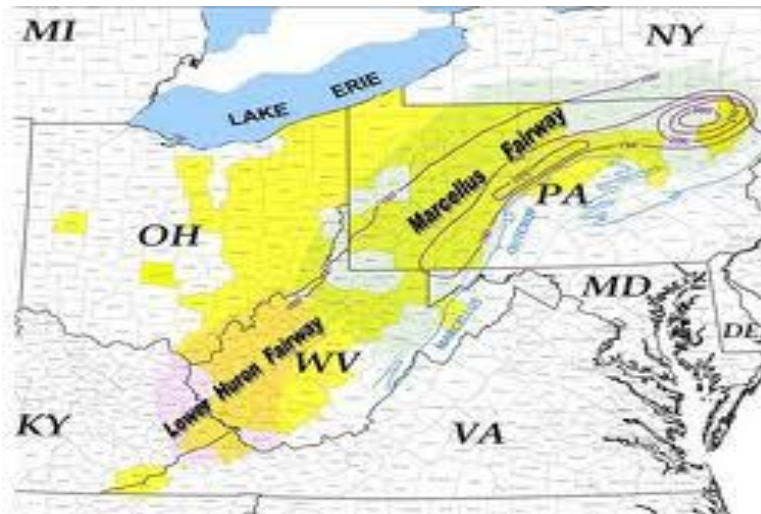
A COMMUNITY AND UNIVERSITY SYMPOSIUM

IUP'S HUB & EBERLY AUD. NOV. 3RD & 4TH

INDIANA THEATER EVENING NOV. 5TH

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