

Classroom to newsroom to final product: Knowledge-based journalism and the UNC News21 experience

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Introduction

This case study describes what happens when a group of highly motivated journalism students are given the means, knowledge and training necessary to create an innovative news product. UNC-Chapel Hill is one of the recipients of a Carnegie-Knight News21 grant, and in 2009 and 2010 the school's faculty selected students to create a website with content about U.S. energy use, titled "[Powering a Nation.](#)" The school is participating in a third year of the project in 2011.

Each year, the project was funded for pay, travel and training of 10 students. This allowed for significant creativity, flexibility and experimentation for the students and faculty involved. Because the project called for innovation, new approaches to the development of ideas and modes of storytelling were emphasized and encouraged.

Students were not chosen for this project because of their expertise on the subject of U.S. energy use, but rather because of their skills as reporters, editors, designers, photographers, videographers, graphic artists, programmers and marketers. Strong consideration was also given to a student's ability to work effectively in a group setting and to bring innovative ideas to the process. The need for interaction, respect and understanding among the students and coaches proved to be a key to fostering creative storytelling. A large part of the [student application](#) focused on assessing the capacity for teamwork.

Given the students' initial lack of subject-matter expertise, helping them develop a rigorous intellectual framework for reporting was paramount, and to that end, the class emphasized scholarly readings, visits from national experts, and facilitated critical discussions. This provided a solid foundation for reporting and laid the groundwork for the success of the final product.

An important expectation of the project was that it would demonstrate to other media outlets what could be achieved through thinking differently about coverage. The following were key points of emphasis:

- Use of original scholarship and research, building toward what is termed "[knowledge-based reporting.](#)"
- Collaboration of students with different backgrounds.
- Teaching of different journalistic skill sets to participants.
- Cultivation of a newsroom environment that supported both a dynamic group process and journalistic innovation.

Background

In 2006 Carnegie Corporation of New York and the John S. and James L. Knight Foundation joined together to create the [Carnegie-Knight Initiative on the Future of Journalism Education](#). As part of the initiative, News21 embarked on an effort to change the way journalism is taught in the United States and to train a new generation of journalists capable of reshaping the news industry.

The News21 program started with summer "incubators" at the journalism schools of [University of California at Berkeley](#), [Columbia University](#), [Northwestern University](#) and the [University of Southern California](#). In 2008, the number of incubators was expanded to eight schools, including the [UNC-Chapel Hill](#). Four other Carnegie-Knight schools — the [University of Missouri](#) at Columbia, the [University of Nebraska](#) at Lincoln, the [University of Texas](#) at Austin and the [Harvard Kennedy School](#) — contribute students to the program.

During the semester before the summer experience, students participate in an intensive seminar with professors and guest lecturers. To develop their knowledge base in the area of U.S. energy use, UNC students utilized experts from the university, energy industries and the media.

Overview of the classroom component

Using a traditional academic approach — where the professor’s expertise on the topic determines how the class is focused — seemed counter to the goals of innovation and the students’ development of journalistic depth.

Students were thus asked to determine the focus areas of the class, and each student was responsible for a week’s curriculum. In consultation with the instructor, students completed a “topic sheet” that proposed a focus area, readings and possible experts/speakers. That sheet also required a written justification for the lessons proposed. (View a sample sheet from 2009 [here](#).)

Throughout the seminar experience, which aimed to develop a working understanding of energy industry dynamics and policy, the class emphasized a deep and challenging knowledge-based approach. This meant use of original scholarship and government reports; consulting of local, national and international experts; and the viewing of serious documentary films, visual media and news articles.

The following are the syllabi developed for each year:

- Year-one syllabus: <http://www.lauraruel.com/n21-2009-seminar>
- Year-two syllabus: <http://www.lauraruel.com/unc-news21/>
- Year-three syllabus: <http://www.lauraruel.com/n21>

U.S. energy use and policy constituted a broad field that ultimately needed to be narrowed down to discrete topics in order to create truly distinctive journalistic work. Achieving a level of focus was a long-term goal of the seminar experience, but that needed to be balanced with a commitment to further open-minded, deep learning. In addition, crucial to fostering knowledge-based reporting was ensuring the students’ abilities to discern the credibility of a source when mining for information. As seasoned journalism students, many already had some background in this area, but they needed to become even more critical of the information sources they would encounter in a field that is both highly complex and fraught with controversy.

The [Journalist’s Resource](#) site, part of the Carnegie-Knight Initiative, provides access to many helpful policy studies on the [environment](#), [energy](#), [society](#), [economics](#), and [government](#).

Engaging with the experts

Tapping into the wealth of individuals on UNC’s campus with knowledge of U.S. energy issues was an integral and necessary component to the project. Some of the interactions with experts helped bring about deeper understanding, and some directly influenced student work.

Chemistry professor John Papanikolas, a lead investigator of the university’s [Solar Energy Research Center](#) — a project funded in part by a \$17.5 million grant from the U.S. Department of Energy — was one such participant and source.



His work inspired the creation of an explanatory motion graphic about solar energy research. A News21 student worked directly with scientists, questioning, quizzing and asking them to explain their research in ways that would create an accurate, accessible script that could make the information understandable to a mass audience. (View the result [here](#).) An “[Energy Cocktail](#)” feature was also developed in direct relation to Prof. Papanikolas’ class presentation. “Going to the real source” became a mantra of the class when trying to discern the complex issues of energy. For example, at the students’ request, former Sierra Club president and environmental science professor Robbie Cox, gave a class lecture. Speakers also came from UNC’s

[Urban Planning Department](#) and [Business School](#).

Students also reached beyond campus for experts. Grant funds were used to bring in experts such as Bud Ward, an environmental journalist and analyst who is the editor of the [Yale Forum on Climate Change and the Media](#). Bud spoke with the students about how to communicate complex environmental issues. Another visitor, Danny Orlando, the the EPA’s Energy Star regional program manager, did a “green” class visit by video conferencing with the group. This was a great low-cost and environmentally friendly way to have the students interact with an expert.

In addition, the students attended campus speeches related to energy. In February 2010 the students heard a [campus-wide resenation](#) by NASA scientist James Hansen. The following class period was used to discuss the speech. They were asked not to just report what was said, but to take the time to deeply understand it, critique it, review it again and analyze it.

Conferences were another educational forum that the seminar took advantage of. The approach to these events was, again, not to “cover” them in the traditional reporting sense, but rather to participate in them as critical consumers, scholarly thinkers and innovators. As the students’ level of knowledge on the topic increased, so did their confidence in attending and approaching experts at these events.

For example, students carpooled to Washington, D.C., and attended the [U.S. Energy Information Administration conference](#) two years in a row. Although they were not the target audience for this event, they were able to attend as knowledge seekers. Most students had developed the confidence and curiosity to productively participate by the end of the spring semester and the time of the conference.

(Their knowledge and reporting has been so thorough that the students themselves have been asked to have a presentation table at energy-related conferences and show off their work from the website. For two consecutive years, the News21/Powering a Nation students were presenters at a UNC public forum that featured an interactive panel discussion on the science, policy and economics of renewable energy, and at a session with posters and displays.)

Visual media education, and media criticism

“Movie night” was an educational event started with the 2010 students that continues into the 2011 year. It, too, has become an important part of fostering knowledge-based journalism. Although most full-length documentary films do not necessarily have a goal of unbiased storytelling, the issues they tackle are worth pondering and the techniques used proved worthy of critical discussion.



Films such as [Food, Inc.](#) motivated students to delve deeper into the issue of how much energy goes into the creation of our everyday foods. Having studied books, documentaries and scholarly work on these issues, students went on to produce the following UNC News21 package: [“The High Energy Diet.”](#)

[Carbon Nation](#) was another film attended by students in fall 2010, and it was fuel for discussion early in spring 2011. In addition, the group watched documentaries such as [Casino Jack and the United States of Money](#) to learn about storytelling techniques. Learning about the issues of money and corruption in Washington, D.C., allowed students to gain broader perspective on environmental legislation.

Much of the information students were evaluating came from pieces by the mainstream media. Much of what they were seeing in the media were reports about research and policy they had studied in class. The deeper understanding they had developed through the knowledge-based approach allowed them the critical distance necessary to critique the mainstream reporting. They began to notice the difference between oversimplification of issues and true clarity of explanation.



Moreover, their experience in reading scholarly work and reports gave them increased confidence when examining issues of credibility and truth. For example, in spring 2010 a story about the “Bloom Box,” a power unit, hit the media and came to our team’s attention. The “box” being touted was a device that could generate power on the spot without being connected to the electric grid. Students were able to raise questions and surface problematic issues that a [60 Minutes report](#) did not acknowledge.

Much of the challenge in analyzing mainstream press coverage was to recognize what represented a knowledge-based perspective, and what did not. As students gained expertise and understanding, they also recognized the complexities and layers of information involved and noticed a tendency for the media to oversimplify. This was a topic discussed by students in the seminar. This critical approach encouraged them to think carefully about what would be involved in their future reporting.

Challenges in the knowledge-based classroom

As students became immersed in the topic of U.S. energy use, some interesting patterns of engagement emerged. About five weeks into the 16-week seminar, the students said they felt overwhelmed by the abundance of information made available, and consequently they became prematurely eager, even desperate, to find a focus for their storytelling. At this point, there was a clear temptation on the part of the instructor and coaches to intervene and provide that focus. However, it was essential that this not happen. It became obvious that a key aspect to making the reporting on this topic genuinely knowledge-based meant not simplifying or organizing the information too soon. It also was essential that the instructors and coaches, the majority of whom have worked in traditional media, did not provide definitions and structures that mainstream newsrooms would. With the goal of innovation in mind, it proved wise to allow the students to conceptualize and structure without limitations.

This approach frustrated the students. Because they had been trained as journalists, their urge was to get out and begin working on a specific story as soon as they could. But keeping students' minds open to the full world of objective knowledge was crucial. The class did, however, ask students to develop at least one story idea from each set of readings/ speakers. This exercise allowed students to see trends over the long term of the course and get a focus for the site. Ultimately, the deeper knowledge they gained through patient study served in the long run to help them better focus the site content in a meaningful way.

It was important for all participants involved to understand that during the first half of the knowledge-based learning period, students and faculty should not get bogged down in the details of how something would be done. The focus was on coaching the students to discern what *needs* to be told. The “how” of the journalistic process came next.

Knowledge-based journalism in the newsroom

About two-thirds of the way into the 16-week semester, the students started to organize into story teams. But before story teams were determined, they created the website's mission statement, which was formulated through a collaborative process by all team members. Once they decided on the mission, they settled upon story ideas and — crucially — the best media forms for delivering a particular story.

As mentioned, students were chosen for their expertise in a specialty skills area, and once story topics were determined, teams could be developed based on what media forms were chosen to best tell each story. Of course, these decisions were fluid. Students were asked to remain aware of the strengths of each media form and look at opportunities for better storytelling options should they arise.

After the 16-week seminar to prepare students with knowledge-based journalism approaches, the students were ready and eager to begin producing. The instructor assigned roles such as editor-in-chief, video producer and graphics director that clearly defined responsibilities. Each story team had a student assigned to be team leader and one or two coaches who were experts in the storytelling format (writing, photo, video, graphics, interactive.) Although the coaches participated in aspects of the preparatory seminar and therefore had some subject knowledge, the students, who had cultivated a certain level of expertise, lead the editorial process.

The teams remained flexible and let the content drive the way the story would be told. Different kinds of topics received different treatment, as evidenced in the following:

- For the package [“Blackout on the Hill.”](#) the team determined that this story was best told with a strong narrative and a graphic explanation that required a large amount of research. Therefore the team consisted of a lead writer/reporter, a graphic artist and researchers who also did some writing.
- By contrast, for the package [“On the Edge”](#) it was determined that the story would most effectively be told primarily with a photo/video narrative piece. The team for this story was comprised of three photographers/videographers and one writer/photographer/videographer.

As team members moved into reporting and production mode, they possessed a certain level of confidence that seemed to come from their knowledge-based journalism training. When the Gulf oil spill unfolded right at the start of the summer 2010 newsroom, the students were able to tackle the story boldly because of their seminar background in energy issues. One of their early successes in reporting the story involved uncovering a [contract that BP was asking its workers to sign](#) that prohibited them from discussing the oil spill with the media.

As you can see in the following, a wide variety of innovative stories and approaches ultimately found their way into our collective reporting efforts. Here is the net result and product from the first two years:

- Second-year news site: <http://unc.news21.com/>
- First-year video, “Powering a Nation Overview”: <http://unc.news21.com/index.php/stories.html>

Examples of individual innovation

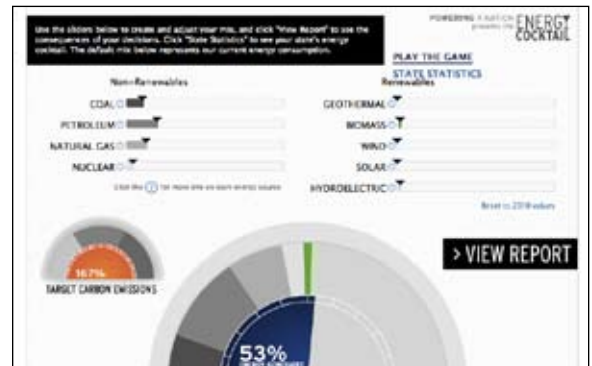
During the course of the learning experience, students time and again demonstrated creativity in approaching complex energy issues. For example, Jose Ignacio Corbella, a 2009 master’s student, came into the project with a demonstrated expertise as a photojournalist and videographer and a strong commitment to new technologies and techniques within these areas of expertise.



Corbella’s video story, [”Roping the Wind.”](#) employed new techniques. One is the use of video portraits. Corbella’s spelled out his philosophy in his reporter’s [blog entry](#): “The idea of a video portrait . . . is those few seconds previous and after a photo — that spontaneity that usually gets ruined in the countdown. Capture more than just a frame. Don’t freeze life; capture it in its totality.”

Andrew Gaerig, 2010 student editor-in-chief, came into the project

as an excellent reporting and programming student. After a class presentation from a campus expert on alternative energy, he envisioned and developed an [interactive game](#) for the purposes of helping users understand the complexity of using a variety of energy sources to power the United States. Gaerig’s game was successful because he and student Amanda Loy (a talented graphic designer) worked together to create a dynamic, interactive game. In addition, this team of two called on coach and UNC Ph.D. candidate Bart Wojdynski to run user tests on the interactive, to ensure that the interface was usable and understandable.



Knowledge-based journalism and new risks of bias

As students’ depth of knowledge on a concept increased, so did their tendency to develop a point of view on the topic. The job of the instructor and coaches at this point became critical. Students sometimes required reminders of who the audience was, their own role, and how best to provide a credible and fair report.



When some students working on a piece called [“The High Energy Diet”](#) became determined to show the extent to which oil-based fertilizers, pesticides and mechanized equipment were key aspects of most food production, they created a video, [“The Secret Ingredients of Your Food.”](#) Some newsroom coaches said the piece went too far and had the potential of confusing viewers. Others thought it was an attention-grabbing demonstration. The ensuing discussion was a passionate but valuable learning experience for all involved. (See a student’s related blog entry [here](#).)

The knowledge-based approach also brings with it another potential risk: overconfidence in one’s own expertise. As reporters built their knowledge, they sometimes developed presumptions of expertise. Such beliefs can introduce bias into reporting and relate to the age-old question: *Can journalists be truly objective?* The issue tends to surface as journalists delve deeply into the issues, and it is something about which anyone teaching knowledge-based journalism should be aware.

The 2010 team addressed some of these issues by creating a [staff editorial](#) that summarized some of the points of view they developed.

Conclusion

The News21 experience described here is a real-world demonstration of how knowledge-based journalism can clearly result in deeper, more complete reporting. The News21 model can be adapted to each school's own situation, and topics and content can be derived from local issues in the school's community. Each journalism school should rely on its own scholars and experts to help train the students to understand and think critically about issues before reporting on them.

Even if securing generous funding for such a project is not possible for a journalism school, developing a similar knowledge-based approach — steeping students more fully in the [intellectual world of research](#) and critical issues — can empower students, allowing them to produce deeper and, ultimately, more innovative news stories.