a day in the life of web 2.0

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The latest powerful online tools can be harnessed to transform and expand the learning experience.

An eighth-grade science teacher, Ms. S, retrieves her MP3 player from the computer-connected cradle where it's spent the night scanning the 17 podcasts she subscribes to. Having detected three new programs, the computer downloaded the files and copied them to the handheld. En route to work, Ms. S inserts the device into her dash-mounted cradle and reviews the podcasts. She selects a colleague's classroom presentation on global warming and a NASA conference lecture about interstellar space travel.

As with all the teachers at her middle school, Ms. S keeps a regular blog, where she writes about everything from homework assignments to reflections on course topics, with a full description posted each Monday morning on the how, what, and why of course material to be taught in the upcoming week.

The teachers' blogs are all syndicated using RSS—Rich Site Summary, or the more informal and descriptive Really Simple Syndication. With aggregation software, students, parents, administrators, and other teachers can subscribe and have the freshly written blog entries immediately and automatically delivered to their desktops. Professional development, communication, cross-curricular lesson planning, and articulation among grade levels are all served as educators

regularly read each other's blogs and learn about topics and activities taking place in the various classrooms.

The Monday reports in particular enable them to benefit by sharing strategies and materials with colleagues who teach the same subject or those in other departments. For instance, Mr. K, a health and P.E. teacher, frequently finds ways of integrating science issues covered in Ms. S's classroom with his health topics. He knows that Ms. S will focus on genetics this week, and he will be teaching about disease next week, so he arranges for them to meet and discuss a combination assignment. In preparation for the meeting, Mr. K conducts a Web search to find the most informative sites and adds the Center for Disease Control (CDC) to his social bookmarks.

Meanwhile, social studies teacher Ms. L scans through sites tagged *genetics* in the school's social bookmark service. Her students may need quick access to them as they discuss genetic engineering current events during class. Mr. K's CDC site appears along with other genetics sites that have been saved and tagged. All assignments in Ms. L's class are turned in as blog entries, because she finds that their conversational nature encourages students to think and write in more depth than traditional formal essays or short answer assignments. Another advantage of receiving assignments in blog format is that both she and her students can subscribe, which means all of the kids' blogs appear in her aggregator, and students can reap the benefits of seeing each other's work.

Ms. L crafts the blog assignments with an eye toward training students to think critically and to post informed, well-considered opinions. A common classroom activity, for instance, is to have students read the blogged entries of others and write persuasive reactions—one in agreement, another in disagreement—and post these writings as comments to their classmates' blogs. Initially, the students struggled with the task, but they eventually learned the goal was not necessarily to find an idea with which they personally disagreed but to find another side to an idea and write persuasively from that perspective. For the genetics assignment, students assume a range of positions—some that discourage work in genetic manipulation based on security, cost, and ethics, and others that support it based on the potential cure for disease, life extension, and increased food production. In response to these blogged assignments, Ms. L posts assessments in the form of comments.

A few doors down the hall, veteran English teacher Mr. P is reviewing a new batch of student wikis. In an effort to help the students become better communicators, he never provides study guides for tests, instead relying on students to construct

their own study resources using their team wikis. He rewards teams that create the most useful study guides.

Mr. P uses a wiki tool installed on the school's network. He devotes one part of the wiki site to general information and resources that he and the most accomplished students can edit. This part of the site serves as the class textbook. He also maintains other parts of the site for class teams, usually four students per team. These sections have their own passwords, and team members can log in to their wikis and enter text, images, and links to audio and video files. Teams can also format their content in a variety of ways. Mr. P is able to track the number of unique views for each page so that he can measure and reward teams for producing the most useful communications.

Earlier in the day, Student A had left Mr. P's room in a jubilant mood, because she'd just learned that her team produced the most useful study guide for the previous day's test, which earned them 10 points toward level three in the class. Level three will give the team much more editing access to the class wiki and more opportunities to contribute to the class literary Web site and the literary book the students will publish at the end of the school year.

Mr. P begins adjusting the volume on the microphone that hangs from his classroom ceiling. Today's discussion about *The Grapes of Wrath* will be recorded and posted in an audio file as a class podcast, as are all significant class presentations and discussions. Students, parents, community members, and other educators subscribe to his podcast programs. In fact, on the other side of town, Mrs. B, the parent of one of Mr. P's students, is listening to a podcast classroom conversation about a science fiction short story the students recently read. She and other parents subscribe to the podcasts so they can more easily engage their children in conversations about school.

At about the same time Mrs. B is listening to the lively classroom discussion, her son, Student B, is keying a text message from his school desk to his social studies class team. He briefly describes an idea for putting together a video as part of their current class project on rural cultures. The video idea had occurred to him a few days earlier while he and his mother were talking about one of the lesson recordings she'd listened to. Student C happens to be in study hall when she receives Student B's message and is excited about using a video in their presentation. She immediately accesses the school's social bookmarks, looking for sites that have been submitted by their science teacher, Ms. S, tagged with *soil* and *plantgrowth*. She identifies two sites, one from the Discovery Channel and the

other from the USDA, called Ask a Worm. The idea is to create a video animation illustrating how soil quality affects cultures.

As Student C tags the sites for her team, school librarian Ms. J is conducting research on behalf of a new math teacher. She and the school tech facilitator both subscribe to all of the teachers' Monday report blogs. They use a shared spreadsheet to maintain an ongoing curriculum map of what's being taught in the school, based on the weekly updates. The librarian and tech facilitator use the map to support teachers by finding and identifying resources and strategies related to what they are teaching. Ms. J is using a blogging search engine to find some serious Web logs about mathematics so that the new teacher can include more practical applications in her current unit on real-world math. She finds several blogs: Galileo's Dilemma (math, physics, and chemistry), Dr. Katte's Blog (engineering), and BizImpresario (entrepreneurship). The librarian then adds the three blogs to the school's social bookmarks and tags them for the meeting that she has just noted on the school's collaborative social calendar.

Meanwhile, the principal is also looking at the school calendar. She is finishing up a weekly blog entry that describes happenings at the school for the next seven days, including two class podcasts, a band concert (also to be podcasted), a guest speaker, an interesting lesson about ancient civilizations, and the PTO meeting. The administrator subscribes to and scans all of the teachers' Monday report blogs for material to include in her weekly report. She always posts the blog entry by the end of the day on Monday, which is read not only by parents but also by educators at other schools, district leaders, and people from other parts of the community and country.

Early that evening the district superintendent reads the principal's recently posted blog. He also subscribes to the teachers' Monday report blogs, because he finds that their writing gives him a bank of ideas for promoting the district and its efforts toward continued improvement. After he finishes the reading, he briefly accesses the wiki site where he and a committee of educators and community members are collaborating to develop a district improvement plan. He jots down a couple of ideas that occurred to him while reading the digital conversations that have come to define the middle school. He moves on to publish the wiki version of the improvement plan, which invites interested community members to edit the improvement plan within the wiki and insert their reflections and ideas through attached comments. This superintendent truly believes that "It takes a village... "

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