



MAINE CTE *PROMISING PRACTICES* MINI CASE STUDY

Waldo County Technical Center

Belfast, ME

Director: Paul Cochrane

PROMISING PRACTICE: Literacy Integration

Student population: 350 juniors and seniors

Sending high schools: Belfast Area High School, Searsport District High School, Mount View High School

Getting started

In June 2006 Michelle Gharst, the school's literacy specialist, brought a small group of teachers to attend a literacy institute held at Capital Area Technical Center in Augusta. During the 2006–07 school year, Gharst worked with a small group of instructors to increase the amount of literacy support and instruction occurring in both the classroom and the shop, offered professional development at staff meetings, and used the Scholastic Reading Inventory to assess students' reading levels. During the 2007–08 school year, literacy went from being an "extra academic topic" to something that instructors realized they needed to pay attention to as part of their classroom instruction.

Keys to success

All Waldo Tech instructors have participated in at least one form of literacy professional development over the past two years. Both director Paul Cochrane and literacy specialist Michelle Gharst said that the key to getting buy-in was that participation was *voluntary*. Gharst and Cochrane said that they encouraged the use of the literacy support strategies, offered and publicized multiple types of professional development, and made sure there was time to share during faculty meetings how different instructors were using the strategies in the classroom. "Having other teachers sharing their successes with their peers seems much more manageable, not like it is a mandate. I think it made it all seem doable," said Gharst.

According to Cochrane, hiring Michelle to be the literacy specialist/coach was also key. Gharst says she was successful because instructors knew her: "I was already working at the center and had already worked with all of the teachers because of portfolios so I already knew each of their teaching styles and they already knew me." According to Gharst, the message was not to do more reading and writing but to get kids more engaged with their learning. "We wanted instructors to shift from 'read and answer the questions' to having students use literacy strategies to find the important information in the chapter." Cochrane said his goal was to see more students leaning forward in their seats: "You can tell those teachers who are getting kids more involved in their own learning. You can tell by the forward posture. We need to expand that."

What it looks like in action

In May 2008, there were Word Walls related to current units of study in at least half of the classrooms or shops. The words highlight the wide variety of specific technical terms that students need to learn in various programs: *endangered, threatened, extirpated, tree growth tax program, purchase development rights, pitch, overhang, bird's mouth, hp raptor, ridge pole, framing square.*

In the small engine classroom, students had just completed a *Knowledge Rating Guide* with the words on the Word Wall: *plunger pump, pressure flow system, centrifugal force, radiator core, thermostat, radiator, vari volume pump.* Then students reviewed the chapter they just read using the *Give One, Get One* strategy. Each student jotted down key information in the note-taking graphic organizer and then passed the organizer to another student. All fourteen students were busy with the exercise – clearly they were used to this routine of collaborative note-taking. After they finish, the teacher probed student understanding of key ideas: "Can you tell me what happens after that?... Can you give me an example of

This case study is based on multiple conversations with Paul Cochrane and Michelle Gharst, document review, teacher survey results, and an onsite visit in May 2008.

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that?... Efficiency and the life of an engine depend on how well it is cooled, right. What would decrease the life of an engine? What could malfunction?”

In the brightly colored graphics design classroom, students brainstormed how they would develop a logo for a local nonprofit organization. Before the discussion, students had read and discussed an article about creating logos. During the brainstorming session, students contributed ideas, did a think-pair-share and discussed and sketched possibilities.

In the auto repair classroom, students raced to skim the text for key information. “Welcome to Literacy for Donuts,” explained the instructor, “It’s Team Alyssa vs. Team Shane...Tina and Zach...Under spray gun set up, what is the PSI? ...Okay next one...when setting up an HLVC spray gun, do what? Look at the top of the page...look for the bold print...” Students focused when it was their turn and cheered one another on. The sense of community and camaraderie was high and everyone was paying attention.

In the Horticulture classroom, the Word Wall was on the only wall where there were no plants. Amidst plantings and soil samples, three students worked on their presentation for the upcoming Envirothon. They planned to discuss the evolution of the pond that lies at the edge of the property.

What teachers said

Almost all Waldo center instructors said that they had students read at least 1-2x weekly. Eleven instructors ask students to write at least 1-2x per week. Instructors responded that students read a wide variety of types of materials including textbook chapters, articles from trade journals, informational websites, manuals, and blueprints/charts/ tables/graphs. Students write work log entries and work summaries, quick writes, notes, and answers to questions on at least a weekly basis in many classes. During the spring, students also wrote letters of application and resumes in many classes.

When asked how what they are doing is different than before the emphasis on literacy began, most instructors said that students are doing more reading or are doing more reading “on their own” as opposed to being read to or told what is in the text. When asked which literacy support strategies teachers or students used more than three times in the past year, the following strategies topped the list: Word Walls (8), Triple Entry Vocabulary Journals (6), Quick Writes (5), Skimming/Scanning/Use of Text Features (5), Give One, Get One (4), Analytic Graphic Organizers (4), Knowledge Rating Guides (3), and Think Pair Share (3). From the survey, it is impossible to tell how often or how independently or with what types of text students are using strategies. Gharst also stressed that many of the instructors had just begun this level of strategy use in the past few months so the answers did not represent regular classroom practice over the course of the entire year.

The number of years teaching or the program area was not a predictor of whether instructors were likely to use strategies. What seemed to make the difference was if particular strategies “made sense” to instructors – if the strategy was easy to teach and use and instructors thought it made a difference, they seemed happy to incorporate it into instruction.

What students said

I actually like it [Give One, Get One] a lot. It gives me a much better understanding of the words that are involved in small engine repair. Looking at the book and having to write it down if you don’t know it but think it is important helps a lot. We read three times a week in this class. That’s more than we read in my high school.

I think it helps. They want you to write quickly and that helps me find stuff quicker. I read more here – I don’t have to read a lot at my home school – just a little for biology and English.

We fill out the paper [Give One, Get One graphic organizer] and all go over it and it helps. It helps a lot.

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This [skimming and scanning team exercise] helps me answer questions back at [my high] school. I like it – it's fun. It's like "compete to read." It's not what you know, it's what you can find.

I've improved. Before it took me forever to read something – I had to read it all the way through. Now I can look things up faster. It's good.

What difference is it making?

Waldo Tech administered the Scholastic Reading Inventory at the end of the 2006–07 and 2007–08 school years. Instructors got the list of students' reading levels at the beginning of the next year. They could also see if students made gains over the year.¹

The small engine and diesel tech instructor was excited about the gains his students had made. Of 23 students, 43% made gains, most of these greater than would be expected, and only 17% lost ground. This is somewhat atypical for 11th and 12th graders, where staying the same and losing ground has been the norm in many career and technical settings.

This instructor had participated in the CTE literacy mentor training and had worked with the literacy specialist/coach. He said that students engaged in the following literacy practices as a regular part of program area instruction:

- Read in class 1-2x weekly (textbook chapters, informational websites, and manuals and reference books)
- Write in class almost daily (Quick Writes, work log entries, work summaries/write-ups)
- Regular use of four literacy support strategies: Word Walls, Quick Writes, Knowledge Rating Guides and Give One, Get One (used for collaborative note-taking).

The instructor did not have a teaching background when he came to the center three years ago. When asked how his classroom practices had changed, the instructor said, "I [used to] read TO them...Last year I did more lecture...Without these literacy strategies I don't think I could have done this. I was 24 years in industry – I took the college courses but it was the literacy strategies that made the difference."

Next steps:

The center plans to hire a new literacy specialist to continue the work that Gharst has gotten underway. Cochrane added, "We will focus the new literacy specialist's time to work with second year instructors. That seems to be a good way to focus the support. We also have to get better at using our data."

Waldo Tech needs to ensure that the amount of reading, writing, and critical thinking continues to increase, that students be expected to regularly use literacy strategies to read and analyze complex material, that students meet higher expectations in terms of writing and presenting, and that students learn more about the lexile levels of reading in fields that interest them. Common agreements to frequently use Word Walls, graphic organizers, and rubrics for projects and presentations need to be made by the staff. It will be helpful to have instructors share how use of the strategies helps students to engage with reading, writing, and learning. Integration of academic standards into all classroom instruction will ensure that expectations are calibrated across programs. All of this will be important to prepare Waldo Tech students to meet the literacy demands of 21st century careers.

For more information, contact Paul Cochrane at 207-342-5231 or email him at pcochrane@msln.net.

¹ It should be stressed that all students at Waldo Tech attend other high schools as well so any gains cannot be strictly attributed to instructional practices at the center. Given the small numbers of students involved and the issues with variability on the SRI, any results have to be interpreted with caution. Technical difficulties with test administration made it impossible to verify typical patterns of growth at the center.