

AISI: Transforming Writing with Technology Written Conversations Develop Minds for the Future

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Abstract

Groups of teachers in Edmonton Catholic School District have applied a variety of strategies to help their students experience greater success in online learning. Teachers report their students have shown gains in levels of engagement, writing skill, critical thinking and digital citizenship. In addition, teachers have become more confident in their questioning skills, and in their ability to provide useful feedback to students.

Introduction

A plethora of events in modern history have helped shape who we are. Two World Wars, AIDS, the 2004 Indian Ocean Tsunami, Hurricane Katrina, 9/11, the 2010 BP Oil Spill, the 2010 Haiti Earthquake, the 2011 Japanese Tsunami and nuclear disaster are but a few of hundreds of life-altering forces that have impacted people's deep seated beliefs, philosophies and understanding of the world, and their place in it.

Possibly more than at any other time in history, humans are becoming aware of many aspects of modern life that are changing forever. Commerce, media, and news have been globalized. Cultures and societies are being obliterated and re-formed monthly. And, virtually at the centre of so much change in the world, the Internet has become ubiquitous - an "event" that threatens to reshape global teaching, global learning, and global communication like no other.

Web 2.0 is a phenomenon. Like the other world events previously listed, Web 2.0 shapes our beliefs, philosophies, and understanding of the world. We, as educators, must recognize its speed and power. Moreover, we are challenged to adapt Web 2.0 directly into our classrooms and schools and be on the cutting edge of a new generation of learning and learners where all students can reach and be reached by others through the power of electronic exchanges. If educators choose not to get involved, we will lose an opportunity to influence how Web 2.0 might be recognized, honored, and developed to serve the educational needs of our students.

For most of human history, it could be argued that the oral and written understanding of our world was shaped by and for small groups of the elite. However, today's new forum is online, and all our students are welcomed. In this unique place, students can develop their minds [as outlined in Gardner's (2006) *Five Minds for the Future*], and refine their 21st century skills.

The Edmonton Catholic School District Experience

The Edmonton Catholic School District (ECSD) AISI Literacy Strategies for the 21st Century Project, in grades 7-12, are trying to do just that. ECSD students are demonstrating their understandings and developing their “minds for the future” (Gardner, 2006) using online conversations across all their content area classrooms - Language Arts/English, Social Studies, Mathematics and the Sciences. Through our personal lived examples, we hope to share with readers the benefits of online pedagogy, and the procedures required for effective implementation.

Benefits

“We use extended oral and written messages to reason with other humans. These sophisticated messages, called *discourse*, are further characterized by their form and content” (Fisher, Frey & Rothenberg, 2008, p. 22). ECSD students are learning to reason with other humans using discussion forums. They are learning to write effectively in forums so that they can clarify their thinking within and among subject areas, think deeply, communicate what they have learned, explain and justify ideas, apply what has been learned to new situations and problems, make connections between what they know and what they are learning, and ... build confidence [in all] subject areas (Beers & Howell, 2005). As they engage in these ways, ECSD students are developing disciplined, creative, respectful, and ethical minds. We firmly believe that, to prepare students to be responsible and successful citizens, educators must provide students with the necessary skills to interact with and make sense of the world around them. The Alberta Program of Studies, across all disciplines, includes skill outcomes in areas of communication. Our experiences have shown us that the ways we have promoted and developed written conversations has helped increase student engagement, student collaboration, and reflective writing. Moreover, it has led to improved grammar and communication, content retention, and comprehension.

Melissa, a teacher from St. Rose school, described her student responses online as being, “Way more in depth and on topic” than when done aloud. She went on to explain, “Students prefer this because it challenges them to write better responses.” Students are equally enthusiastic, as the following comments indicate:

- “I think it’s a good way for everyone in our class to have a say in what their opinion is on the matter instead of in a classroom situation where only some people raise their hand to speak.”
- “Putting your opinion onto something and also critiquing other people’s work and using your peers helps you learn and helps them to learn.”

More successful learning has been a direct result of our teacher and student discussion forum work. In addition, content area conversation skills have proven to be *transparent* and *transportable*. Discussion board/forum writing skills have truly become part of students’ thinking that they can independently apply (Ivey & Fisher, 2006). Our teachers and students can also see how transportable these skills are because they can be used across every subject area (Ivey & Fisher, 2006).

Grade 7, 8 and 9 students at St. Rose, for example, easily and effectively learned to participate in discussion boards and forums where they discussed current events in social studies, compared and contrasted characters in language arts, explained and shared new learning in science, and created problems for peers in math. The degree of success was not an

accident. It resulted from careful planning and explicit implementation strategies being applied by most teachers to the discussion boards and forums. Questions and prompts posed by educators and students had to be engaging. Assessment was ongoing and clear. How did we do it?

Procedures Required for Effective Implementation

Getting Started

We have found that, when students are carefully prepared for discussion boards and forums, when digital citizenship expectations are explicit, and when assessment is clear, students will be successful. For instance, prior to even taking students into a discussion forum setting, teachers take the time to practice some strategies that scaffold discussions. Strategies from *Inquiring Minds Learn to Read and Write* (2009) such as (1) see, think & wonder, (2) four corners, (3) guided reading/cued think aloud, (4) silent discussion thread, (5) Socratic seminar, (6) panel discussions, and (7) three-level questioning have proven invaluable in helping students learn vital skills that assist them in discussion forums. When these strategies are practiced first in-class, effective discussion skills are more likely to be acquired by the whole class.

As another example, students at Louis St. Laurent Junior and Senior High School worked through discussion threads by silently adding to one another's thoughts and ideas based on specific teacher questions and essay prompts in science and English classes. When it came time to participate in discussion forums, students independently added to discussion threads without turning around to talk out loud with peers. In-class talk can distract some students and detract from the conversations taking place online.

In-class discussions regarding digital citizenship and accountable talk, as described by Morocco, Aguilar and Bershad (2008) proved extremely productive in all classrooms. When teachers engaged with students in open dialogue regarding online etiquette, prior to their entering an online setting, they helped eliminate negative comments, and other comments that took away from discussions. Teachers based their discussions with students on Fisher, Frey and Rothenberg's (2008) suggestions for setting up an environment that facilitates collaboration, learning, thinking and talk. They contend that, to have effective content area conversations, there is a need to create a physical environment, a social environment through community building, and expectations, routines, and a metacognitive environment for talk (Fisher, Frey & Rothenberg, 2008).

When it came time to go into a computer lab or one-to-one laptop setting, students honored online discussions through on-task, responsible and focused behavior. Setting these expectations proved crucial, because online discussions can be accessed from home. Teachers noticed that conversations remained positive and focused whether students were in a class setting or posting from home in the evening. Of course, teachers must monitor student conversations. This point will be discussed more fully in the assessment and ongoing feedback section of this article.

Questions and Prompts

A successful online discussion is dependent on many factors, one of which is the type of question or prompt posed to students. “When teachers plan for talk and clearly establish the purpose and expectations, students use academic language and vocabulary in authentic ways” (Fisher, Frey & Rothenberg, 2008, p. 69). Teachers must take the time to develop questions that require students to use higher-order thinking. Thought provoking questions that engage critical thinking, as well as encouraging students to talk, are not easy to create on the spur of the moment (Fisher, Frey & Rothenberg, 2008).

We continue to work with colleagues to develop strong questions and prompts across subject areas. We hope that, eventually, students themselves will learn how to pose meaningful questions to their peers. If we can hand over ownership to students, we will make it more possible for them to generate their own conversations. Undoubtedly, students will participate in e-mail, blogs and online discussion environments well into their futures. One goal is to provide students with skills to both participate in discussion forums and to learn how to manage their discussions through effective questioning techniques. We expect these skills will help them express their own perspectives and seek perspectives of others from the global community (Morocco, Aguilar & Bershad, 2008). According to Morocco, Aguilar and Bershad (2008),

Discussion is a tool and medium for engaging in the synthesis and perspective taking that characterize a prepared adolescent. In thinking aloud with others, in a common physical or virtual space, around a common topic, students practice the critical thinking skills that will serve them well in future learning communities. (p. 17)

Feedback and Assessment

A primary concern for many teachers is how to assess an online discussion. It is not surprising that the task can seem daunting at first. Discussions can become very long and go down multiple paths. *How to Give Effective Feedback to Your Students* by Brookhart (2008) has given us clear directions for providing assessment for student learning in this new online setting. Brookhart (2008) offers the following suggestions:

- Timing is critical and should be quick. Students are continuously writing in an online setting, so give them feedback “live” as they go. We have found that, if steps have been taken to provide students with different discussion skills and expectations have been established, students work independently. This is classroom management at its best since the teacher can follow along on discussions providing comments and feedback as students work.
- “Good Job” is not effective. Provide students with specific comments and feedback so they can improve their posts. Students should work towards adding to conversations through rigorous posts that are clear and thought provoking. Many students cannot do this yet on their own and rely on the teachers’ effective feedback to guide them in the right direction. (p. 53)

Effective and specific feedback results in students learning how to improve their work. Students become more motivated to want to learn and the classroom becomes a place where specific feedback in the form of constructive criticism is accepted and valued (Brookhart, 2008).

In our experiences, online discussion forum feedback comes in three forms. In the beginning one teacher stated, “After [students] posted their initial responses, we went through

their responses and critiqued them in an honest, open communication setting where everybody felt safe... We looked at what made responses really good and what made some of them weaker than others, and [we discussed] how to strengthen them.” The teacher and her students reviewed specific information, such as how a statement that was poorly written took away from the content. Students generally concluded for themselves the importance of punctuation and spelling for effective communication. They also considered adding more detail and examples to justify a position or a point of view they had expressed.

The second form of feedback occurs when teachers participate directly on the forum, providing feedback and questions “live” as students work. Here feedback to individual student responses occurs. The third type of feedback has been developed in collaboration with teachers. We have developed subject specific rubrics based on the curriculum that teachers can use, share and modify with students. These rubrics are typically used for a small number of posts that the teacher chooses to assess. The rubrics are shared with students so that expectations are clear and transparent. Students are encouraged to refer to the rubrics for ongoing self-assessment.

Conclusion

Far beyond any teacher’s knowledge, and any number of prescribed textbooks, information is bombarding students at an incomprehensible rate. Google, Bing, Facebook, Twitter, the blogosphere, YouTube, podcasts, TV news broadcasts, and radio present an array of sources unimagined until quite recently. We believe our job as educators in the 21st century is to teach our students to discern what is required and what is superfluous and to discriminate between reliable and unreliable sources. They must be offered a variety of opportunities to practice thinking critically and to discuss their learning in a collegial environment where they are supported and also challenged by their peers. We passionately believe written conversations in a virtual setting can help build student confidence and skill. We have seen the evidence that, under appropriate conditions, students will develop:

- their disciplined minds through discourse in subject specific areas,
- their synthesizing minds through integrating ideas from different disciplines and sources in their own words,
- their creating minds by discussing authentic problems, uncovering issues and posing new problems that lead to new and personalized understanding,
- their respectful minds by working directly with others, accepting different points of views and respecting that other’s have different viewpoints both in their classroom and around the world, and
- their ethical minds by encouraging them to think about issues where they realize that they can have a direct impact on the world and are responsible citizens both in their micro communities and in the global community. (Gardner, 2006)

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