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Features

Perspectives
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***David Landis**, Kazakhstan Institute of Management, Economics and Strategic Research, Almaty, Kazakhstan*

Modern schools are oriented toward the past as well as the future. They are oriented toward the past because they must transmit traditional social and cultural values to new generations of students. Adult members of society expect that schools will promote national identity and social continuity by encouraging student allegiance to important political, economic, and social values. According to this perspective, teachers transmit values through questions, problems, and perspectives raised by traditional academic content areas such as math, science, social studies, and literature.

Schools are oriented toward the future by helping their students to understand global influences from movies, sports, music, and corporate advertising that affect national culture and social identity. In addition, schools must help students develop culturally appropriate responses to events such as natural disasters, epidemics like AIDS, and terrorism. From this perspective, modern schools prepare students to think about audio, visual, and printed information through investigations, discussions, and problem solving activities.

As I consider these twin tasks for schools, the question of whether schools are using outdated tools needs to rest within a larger concern— that of providing professional development for teachers so they develop the vision necessary for responding to the social and international influences that affect them and their students while they uphold and evaluate traditional values. If teachers have insight about past values and present global influences, they can adapt/adopt whatever tools and other resources are available to them.

***Ann-Sofie Selin**, Cygnaeus Elementary School in Turku/Åbo, Finland*

Yes and no.

Today schools and teachers know that education is not primarily about what we learn but rather about *how*, and *that* we learn — how to learn. We realise in principle that we need to work at becoming better at learning how to learn. And the modern school also understands that we need to evaluate what we accept as knowledge and how we handle it, how we accept knowledge/substance. Such understanding helps in preparing students for the future.

But we still need to improve teacher awareness. The teacher needs to live the concept of learning to learn. It is not enough to use new tools and to talk about new concepts. It is fairly easy to refurbish the classroom, but without reflection and metacognition such action is mere rearranging without new direction.

Teachers frequently look for new ideas to try out, but teachers also tend to teach as they were taught decades ago. Knowing is not the same as comprehending. In the schools of today teachers need to constantly work on their own professional development, lifting their own thinking so that they really act according to what they understand instead of as they were taught when they were pupils. It is a waste of energy to have the students compile "copied copies" without processing the information. And it is a waste of energy to have teachers use new tricks without internalising the thinking behind the methods. Finally, let us remember that the "old" ways used with reflection may be as good as a bag of new ones even in preparation for the future.

***Ivan P. November**, University of the Free State, South African Republic*

South African society (pre-1994), because of the political system of apartheid, was not used to democratic citizenship with its concomitant rights and obligations. Thus, after the democratic elections, the government had to prepare citizens for a democratic society. A system of outcomes-based education was introduced through which a critical mass of democratically-oriented citizens was to be created.

The outcomes state, among other things, that education should engender critical and creative thinking; that it should encourage the critical evaluation, organisation and analysis of information; and that citizens should participate responsibly in local, national, and global communities. However, because the outcomes are pre-determined and framed according to tenets of instrumentality, they risk eroding people's opportunity and inclination for the open dialogue about such issues which is necessary to transform society.

I contend that, though the current outcomes may create critical citizens, this might not be enough to cultivate citizens for a deep democracy—one in which people can deliberatively and imaginatively engage in a dialogical relationship. Outcomes-based education is aimed at instilling skills that prepare learners for a workplace that satisfies the demands

Are modern schools preparing students for the future?

Photos from the authors' archives

of neo-liberalism and globalisation. The critical question then becomes: "Is it the job of educators to 'prepare' learners for the market?"

***Scott Walter**, Canadian International Development Agency, Canada*

It's hard to generalize about education in Canada, as there's no federal Ministry. Responsibility falls to a collection of 13 separate systems run by the provinces and territories, with much of the authority in the hands of local school boards. Nonetheless, the scores of Canadian students across the country in reading, mathematics and science skills as measured by PISA (which tries to answer the question: How well are young adults prepared to meet the challenges of the future?) ranks them internationally among the very best performers.

A world away in rural Egypt, I recently visited the Community Schools Project. Begun in 1992 as an experiment at the grassroots level in the non-formal delivery of quality education for the excluded (i.e. girls), it has emerged 15 years later as a full-fledged educational movement. It empowers through innovative and active learning and the acquisition of life and livelihood skills. Students consistently outperform their mainstream public school counterparts on official Ministry of Education examinations. Key to success is the involvement of parents and the fact that school governance is in the hands of the community, unique in a country that has a highly centralized federal education system.

An increasingly globalized labour market will place a higher premium than ever on active learners who can acquire the skills of both technology and foundational subjects such as reading. As to the mix and the value placed on those skills, I'm convinced that local schools and their communities know best what their children need.

***Hani Weshah**, University of Jordan, Amman, Jordan*

Schools are regarded as key institutions through which societies retain what is valued from the past while envisioning and building towards a progressive future. Their mission and responsibility is to focus on learners' present and future lives, and to help students critically evaluate societal barriers to freedom, equality, and creativity. Schools are seen to play a corrective as well as a complementary role with other societal institutions. However, schools cannot fulfull their missons without addressing the challenges of isolation, "backwardness", and a tendency to overemphasize students' future aspirations to the detriment of their present needs.

Over the past three decades, our world has witnessed social, economic, and technological changes and challenges which have had a tremendous impact on developed and developing countries and led to the emergence of many new types of schools: Future, Innovative, Intelligent, Comprehensive, Electronic and Community. Of these, I believe the community school to be the most promising: such schools offer a modern vision of educational goals, procedures and curricula. They work to raise awareness of the ongoing social, political, economic, and technological changes and encourage students to become informed and reflective about these issues. In doing so, they play a vital role in preparing individuals for the future.

***Marilyn Cook**, Port Aransas District Dyslexia Specialist, Texas, USA*

"Thinking Classrooms" are what we need to develop to prepare students for the future. For the most part, this is not occurring and our students will not be prepared for the future. Modern schools need to develop "thinking classrooms" and teach far beyond the basics. Inquiry-based teaching is important if students are to be prepared for the future. Students need to begin to develop their own questions during presentations and activities, and learn to integrate information from a wide variety of sources so that they can answer questions beyond the minimum fact level. Our schools need to be teaching students how to learn before placing the emphasis on content. The artificial divisions between academic subjects need to be replaced with a focus on the integration of those areas because in real life ideas and concepts are more integrated than divided. Schools need to help students learn how to discern quality from quantity of information and to be media literate. Reading, writing, and critical thinking are key in preparing our students. The mission statement of *Thinking Classroom* is right on target and I want to applaud TC for encouraging reflection and metacognition in our classrooms—I know it can lead the way to helping our schools develop students as thinkers for the future.

Teachers, Classrooms, and Change

What Should We Teach? Education for What Ends?

About once a year, we indulge in an academic fantasy with a group of our favorite education students. We imagine going off to the wilderness to live and learn and read and write and play together, away from the conventional demands of institutions with all of their petty and distracting requirements. We usually picture the setting to be what people around here call "Up North," the northern Michigan woods and lakes, but sometimes we fantasize that the prairie lands of Saskatchewan would also be suitable: a place where we'd live simply and reflect on everything from the Great Books of world literature to the inequities of 21st century living, from mathematical theorems to great music. We would do lots of canoeing. The fun part of this dream comes when we playfully argue over what the curriculum should be. Although we are aware that these curricular issues are the same ones disputed by Plato and Aristotle in the Greek academies, by the ancient monastic scholars, by the first universities in Bologna and Paris and Prague, by Emerson and Thoreau, by John Dewey and Lev Vygotsky and Paulo Freire, we still love finding our own answers to the perennial questions: What should we teach, and why?

What matters most for 21st century learning? This month we've been reading a provocative new book that has jarred our thinking on these questions. *Critical Lessons: What Our Schools Should Teach*, was published in 2006 by the scholar best known for her pedagogy of caring, Nel Noddings. Noddings writes from a rich background as an elementary and high school teacher of mathematics, as a school administrator, as an educational philosopher and a Dewey scholar, as a university dean, and as a person who has raised ten children. Critical thinking, Noddings states, occurs when people diligently apply skillful reason, but do so on matters of moral and social importance. That idea intrigues us—that critical thinking needs to be applied to topics of great importance to

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Patricia Bloem
and David J. Klooster

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David Klooster and Patricia Bloem are partners in teaching, writing, and living. Patricia is Associate Professor of English Education, Grand Valley State University, Allendale, Michigan. David is Professor and Chair, Department of English, Hope College, Holland, Michigan, USA.

our lives. Noddings argues that our teaching, especially in secondary schools and universities, can and must include challenging questions that help students make their own sense of the personal, social, and political issues that most directly influence their lives. Her book argues that our school curricula should include lessons on the psychology of war, on parenting, on religion, on gender, and on advertising, among other topics. Noddings believes that critical thinking should be applied to all kinds of learning, but in this book she talks about the issues left out of secondary schools, the moral and socially important issues that schools rarely address. She suggests finding ways to introduce vital topics that do not usually appear in the school curriculum, and the point of her book is to argue that critical lessons about the immediate problems in students' lives be taught in schools, and to suggest how such lessons can be incorporated.

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While Noddings' ideas of how a curriculum can shape a secondary school are tailored especially to North American schools, where the culture is particularly resistant to academic tracking and to vocational education, her discussion of critical thinking is very pertinent to readers of *Thinking Classroom*. Few readers of this journal would need to be convinced that we must teach critical *thinking*. But Nel Noddings pushes us to consider whether we also need critical *lessons*.

Why does it feel as though our schools are ignoring what's most essential to our communal living, that our curricula seem removed from the real events of our lives? Certainly part of it is that teachers are being pushed to prepare students to pass this state-mandated test and that university preparatory exam, so that we can no longer teach what matters to us. For many teachers, questions of what to teach are answered largely or exclusively by external constituencies—the governmental bodies or higher education systems to which we are responsible. Within these limitations, teachers often define their curriculum in ways that emphasize the development of individual students: They believe they teach to help students learn in general ways some of what is truly important for their living; and they believe their students will learn specific skills of literacy, quantitative analysis, or scientific method, as well as personal traits such as habits of self-discipline and an inquiring mind. But for the most part, teachers are limited by educational hierarchies to think only about how the required curriculum can be made useful for the students in their classrooms; rarely are they invited to think about what the substance of the curriculum itself should be, and how it prepares students for the society they will enter.

But kids *do* learn self-discipline and exhibit hard mental work outside of school. We've always found it interesting to hear children who will happily tell you they hate math spout off statistics of their favorite sports teams. They've read the paper, they've talked to friends, they've cared to keep the information in their heads, and the statistics mean something to them. Or take as an example our son, who is at this moment practicing the electric bass with his buddy. They have two songs that they play over and over, working out chord progressions, adjusting the amplifier for each riff, showing incredible attention to detail. True, these two boys learned the basic skills of reading music and playing their instruments from

Teachers, Classrooms, and Change

adults. But what part did school play in this learning that is going on between them now? The self-discipline the boys display and their love of learning music has little to do with school.

Conversely, sometimes school asks students to think about things they'd rather not consider. Students wonder whether the lessons are really useful and important. Carol Jago, a former literature teacher, responds, "It doesn't matter whether or not 16-year-olds say they don't 'like' a book. What matters is that they read it and consider what can happen when poverty pushes a family past endurance. Books like *Grapes of Wrath* have the power to shape lives. The problem is that most teenagers don't want their lives to be 'shaped' by someone not of their own choosing" (Jago, 2004, p. *xi*). Noddings would certainly agree that students need to consider what poverty does to human beings, or what war does to the people involved in it, or why war is so attractive. Moreover, she is quite worried that schools skirt these significant questions far too often. She asks us to consider how these critical issues should be taught to make them genuinely interesting and worthwhile for teenagers.

Critical thinking matters immensely. Critical thinking is basic, foundational — certainly more than a narrowly defined skill. But Noddings helps us see that without critical lessons and the meaty issues to pin them on, critical thinking isn't enough. Are our secondary schools setting kids up to learn but not getting to the real issues, the work that connects and matters? Of course there is a place for learning for learning's sake. But critical thinking—and school learning—need to address bettering our world.

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For example, in her series of lessons titled "Other People," Noddings begins by helping students philosophically examine their first relationships, with their mothers, and then moves on to the processes of socialization. States Noddings, "If we are interested in critical thinking, we cannot be satisfied with the mere acceptance of our efforts to socialize. Students…must be helped to understand the processes of socialization. Which norms should I accept and endorse? Which should I question or study more carefully? Which should I reject? And why, why, why?" (p. 118). She moves from discussions of moral interdependence to its connection with shared responsibility. Her claim at the end of the chapter, that "possibly no critical lesson is more crucial to moral life and happiness than this one" (p. 118) reminds us that her intent is not to create cynics but to develop critical thinkers who will "not give up working rationally and passionately for a better life, a better world" (p. 197).

Teachers who read *Thinking Classroom* are just the ones to be carrying on this conversation about what our schools should teach, because this reading community includes teachers from every level of the educational system, and from many countries around the globe. But it would be smart to recognize that as a group, we teachers have a self-confidence problem. Political structures within our various countries have systematically undermined teachers' self-confidence by blaming schools for social and political failures, by removing decision making authority from the classroom teacher, by putting all of the societal emphasis on standardized tests instead of authentic learning. It will take an equally systematic effort to reinvest trust and decision-making competence in our teachers—a long series of small steps that tell teachers "You decide, we trust you, you are the professional at what you do, you know the students and the

learning goals best." A conversation about Noddings' list of what needs to be addressed—for example of the psychology and the soul-destroying effects of war, and of what difference gender plays to our individual natures—is a great place to begin.

To support these steps, we'd like to deepen and expand our column conversations on critical thinking to include applying critical thinking processes to learning that is critical for our living. When we talk about critical thinking, we'd like the talk to be raised to a new level. It's not at all that we oppose a measure of learning for learning's sake. Rather, we oppose the outpouring of time on learning that is learned for the sake of a standardized test, for mere recitation purposes, for learning that takes away time from discussions of the critical lessons of what it is to live in the 21st century.

We also propose that as individual teachers we engage our colleagues with this set of questions:

- What is critical?
- What should we be teaching?
- Education for what purposes?

Can we agree on what topics are critical for our students' learning? Many of us are out of step with our colleagues and our school systems. We struggle to find our place and to feel sustained and supported in our ways of thinking and teaching. But we have also struggled to find constructive ways to engage others. Perhaps this proposed conversation, because it cuts to the heart of what we do, will help clarify our own thinking as well as the thinking of others around us. We need to engage our colleagues in this conversation in our own buildings, in our departments and faculties and universities. We need the conversation to expand to our cities and regions, to our nations and their centralized educational establishments. For too long directives have come from those centralized offices to our classrooms. It's time we talked back.

A few years ago, we visited the ruins of the ancient university in Gladzor, Armenia. On a mountaintop with a thrilling vista across the Caucasus, stone foundations outlined the former classrooms, residences,

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and library of one of the earliest formal universities. A short distance away, seven granite stones stood in a row, a group of three and a cluster of four. Were they tributes to the rectors of the university? Markers for the graves of problem students? No, said our guide. These stones commemorate the curriculum of the university—the Trivium and the Quadrivium. Students first learned to be critical thinkers by studying grammar, logic, and rhetoric in the Trivium, and then they moved on to the critical lessons of that era in the Quadrivium—mathematics, geometry, music, and astronomy. The Trivium offered the skills of language, reason, and persuasion, and the Quadrivium offered subject matter on which to exercise these skills. The stone markers remind us that on that mountaintop long ago a conversation took place about what students need to learn, what teachers need to teach, and what schools and universities owe to the societies they serve.

It's an old and venerable discussion that we should take part in, one that teachers and scholars have held for eons. What matters in learning? What should we be teaching? Education for what?

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Lynn Lemisko & Angela Ward

Team-Teaching Across Disciplines in the University

Photos from the authors' archives

Lynn Lemisko and Angela Ward teach at Curriculum Studies Department, College of Education, at the University of Saskatchewan, Saskatoon, Canada.

This article describes our shared experiences as we developed and taught a university class that combined the theory and practice of teaching social studies and language arts. Currently, students in the undergraduate teacher education program at our Canadian university are required to enroll in two separate methods courses—one for social studies and another for language and literacy. In an effort to develop what we hoped to be a more coherent and meaningful learning experience, one that promoted praxis and critical thinking, we decided to work together.

- We organized our timetable to have one group of students together for two full afternoons a week, enabling us to offer instruction as a teaching team. This also allowed us to go off campus to a local school during class time.
- We integrated the content of our social studies and language arts courses to encourage our undergraduates to explore concepts, skills, and ideas across the two disciplines, promoting critical thinking.
- We arranged for practical experiences in a local school so that student teachers would have the opportunity to apply theoretical knowledge and methods early in their program.
- We developed assignments that required education students to demonstrate their understanding of integrated language arts and social studies education through practice-based experiences.

In this paper we describe how we integrated course material; share details of some course assignments; and identify issues, challenges, and successes that arose from this alternate approach to teacher education. We also include suggestions for teachers, from early years through to university, who might want to integrate learning units across traditionally separate disciplines. We hope that readers gain a deeper understanding of the theoretical and practical issues of integrated teaching and learning approaches.

Thinking about interdisciplinary learning

Historically, teaching approaches that attempted to integrate student learning across subject areas have counteracted educational methods perceived to be rigid and removed from real life experiences. Project-based work, such as having elementary students produce class newspapers or carry out research studies based on local issues, was common in North America and Britain in the early 20th century (Kilpatrick, 1918). These ideas grew out of Dewey's (1899) theories of authentic learning based on practical experience. Again in the 1960s experiential learning was fashionable, and students were encouraged to use knowledge from different subject areas in inquiry approaches.

The trends towards and away from subject-specific teaching are associated with particular assumptions about student learning. If knowledge in different disciplines is considered specific to those subject areas (for example, Gagne, 1965), then students need to be taught specific content and processes. However, a constructivist view of learning holds that cognitive structures are applicable across subject areas (Vygotsky, 1978). The Reading and Writing for Critical Thinking project, which involved teachers and students in developing strategies for learning in multiple situations, is one example of a program built on constructivist theories of learning.

Nikitina (2002) describes interdisciplinary teaching in the humanities as primarily *contextual:* There is an emphasis on "embedding disciplinary material in the fabric of the time, culture, and personal experience" (p.6). She describes the connections between

subject areas in the humanities as associative and multi-causal, not probing deeply into the contributing disciplines to reveal underlying conceptual patterns. Our interdisciplinary work was primarily contextualizing, as described by Nikitina, but we also pulled together conceptual understandings, using "big ideas", especially in topics such as student diversity and classroom discourse.

Our purpose in developing an interdisciplinary course in language arts and social studies was to demonstrate constructivist learning in action, and to stimulate critical thinking. It is especially important that teachers encourage critical and creative thinking in today's multicultural, technologically connected world, where students encounter a bewildering number of competing ideas and discourses.

There were also practical considerations in our development and teaching of this course. We were able to reduce the number of small assignments normally required for two separate courses, and to provide opportunities for activities to be carried out in elementary classrooms.

Using "big ideas"

Specialists who work within particular disciplines often develop a kind of tunnel vision that prevents them from seeing interdisciplinary connections. While we were both committed to creating a more coherent and meaningful learning experience for our students, we are each subject specialists who had been teaching our undergraduate courses in isolation for a number of years. There is no doubt that over time, we had each become attached to particular bits of content in our courses, and we needed to determine how we could fuse the material into a seamless whole. We think that our experiences as elementary school teachers, along with our understanding of the theoretical issues, helped us understand the connectedness of our subject areas.

As others writing about integrating subject matter suggest (for example, see Case, 1999; Drake, 1991; Fogarty, 1991), one very effective approach to integration is *fusion*—that is, the use of concepts or ideas around which particular content can be clustered. Before we could decide which content from each of our courses should be included in our integrated version, we first selected what we believed to be the big idea we needed to address as part of a curriculum and instruction course. While it was difficult to determine a concept that was common to the content of both our courses, it became immediately obvious that the underlying purpose of both courses was to assist education students in understanding both the theoretical and practical aspects of their work, including selecting and planning, and implementing and reflecting. In other words, rather than using a particular concept as the big idea, we adapted the fusion notion of integration and used a process skill as the overarching big idea for our course, specifically: *What teachers need to think about when planning for instruction.*

We also concluded that planning for instruction must take into account four categories, or sub-ideas:

1. The Minds: Whom are we teaching and how do they learn?
2. The Matter: What are we teaching/learning? Why are we teaching/learning this?
3. The Tools: How do we teach this *matter* to those *minds*?
4. Assessment: How can we know if the *minds* learned the *matter* using the *tools* we chose?

We decided that a course in curriculum and instruction should address this big idea through these general categories no matter which particular subject area might be the focus of the course. It seemed reasonable, then, to use the four sub-ideas as the cores around which we could cluster the content drawn from our separate courses. As we clustered the material we immediately recognized how similar our course content actually was; we were also able to perceive how we could infuse the differences into the integrated course in meaningful ways that would enrich students' understanding of their role as teachers. The course outline we distributed to students indicated that we would be exploring the big ideas by examining the content in relation to the four sub-ideas (the complete topic outline follows the article). Once we had integrated the content in this fashion, it was easy to plan the scope

Table 1 **Suggested approach to creating integrated units**

- Select a major topic or theme from one of the subject areas your students are expected to study.
- Brainstorm and list all ideas (facts, issues, and questions) that come to mind when you think about this topic/theme. Try not to edit yourself—remain open to any and all connections to the topic that may arise.
- Select from your brainstormed list an overarching *big idea* or key process to be the focus of your unit.
- Select related sub-ideas from your brainstormed list.
- Examine the objectives of several subject areas. Select from these objectives the content to cluster with your sub-ideas.
- Sequence the sub-ideas in the order you think will best promote students' understanding of the unit's big idea.

and sequence of learning experiences we would offer our undergraduate education students.

Praxis: The practical experience

Developing a plan for engagement with teachers and students at a local school was the next phase. First, we informally contacted a local school principal who was very enthusiastic about teacher professional development. We explained our desire to provide a field experience for our students in a relatively protected teaching and learning environment. The principal selected from her staff teachers she thought would be especially interested in working with education students, and invited these teachers to join the experiment. We then met with the volunteer teachers and the principal to plan the project details.

We asked that our students have the opportunity to plan and implement an integrated social studies/ language arts (humanities) learning experience for the children in each teacher's classroom. However, we wanted to ensure that we were not going to be an intrusion. Working collaboratively with the volunteer teachers, we developed the idea for a *learning stations* approach. In this approach, teachers set up an activity using a variety of materials and approaches, and small groups of children take turns participating at each station. The volunteer teachers each chose a social studies concept or topic to be explored through integrated humanities learning stations in their classroom. The education students, working in small groups, were then responsible for selecting a particular aspect (sub-idea) of the concept or topic as the focus of their learning station, planning the learning station activities, and implementing their plans during three consecutive weeks, with classroom students rotating through each of the learning stations in their classroom over this time period. We also planned an observational visit to the school prior to the start of the learning station activities so that student teachers, teachers, and young learners could get to know one another.

The topic selections made by volunteer teachers were related to the Saskatchewan social studies curriculum and included:

- Cultural communities of Saskatchewan (Grade 2—age 7)
- Saskatchewan's Centennial (Grade 3/4—ages 8 and 9)
- "Hot spots" in Current Affairs (Grade 5—age 10)
- How to Learn about Canada's Past (Grade 5)
- World War II (Grade 8—age 13)

After brainstorming ideas related to these selections and consulting with one another to ensure there was no overlap of topics within a grade level, student teachers chose an interesting array of sub-ideas that became the foci of the learning stations. For example, the student teachers working with the Grade 8 topic, World War II, decided to explore propaganda, Japanese internment, children of war, and the Holocaust at their learning stations; while student teachers working with children in Grade 2 designed activities to explore the Ukrainian, Sudanese, South Asian, and First Nations (Canada's indigenous peoples) cultural communities of Saskatchewan.

The groups of student teachers assisting Grade 5s in learning how to learn about Canada's past had a slightly trickier task, as this selection by the volunteer teacher had a *skills* focus rather than a *conceptual* focus. In deciding upon how they would tackle the topic, we suggested that student teachers

first brainstorm a conceptual focus related to Canada's past. In this process, some groups first selected a particular aspect of Canadian life—e.g., schooling, entertainment, clothing—and then brainstormed how historians would find information about this aspect of life. One group came up with *archaeology* as their concept, which gave them both a conceptual focus and a particular way of learning about Canada's past.

With a clear understanding of their particular foci, student teachers developed specific learning objectives for their stations and created some fascinating activities to engage learners. Activities in Grade 2 included reading picture books and folk tales related to a particular cultural community, learning a few words of the language (oral and/or written), creating arts and crafts in the culture's traditional styles, listening to music and/or learning a dance from the culture and relating these to cultural beliefs. Grade 8 students were introduced to poetry written by victims of the Holocaust and to the diaries of children who were victims of war, and engaged in discussions to share personal responses to this writing. They also viewed video images of Japanese internment camps and discussed human rights violations that can result from wartime paranoia. They explored the meaning of propaganda as they listened to and viewed various examples, examined how propaganda was used by both the Allies and the Nazis during World War II, and created their own propaganda posters. To learn how to learn about Canada's past, Grade 5 students examined primary source documents: They looked at old catalogues issued by Canadian retail companies to explore past clothing styles and costs, and analyzed old school textbooks to discover what topics were studied—and how they were studied—in schools of the past. Children in Grade 5 learned how archaeologists gather knowledge about the past by engaging in a simulated archaeological dig. They uncovered First Nations' and settler "artifacts" buried in containers of sand using small hand tools and brushes, and then speculated as to how these artifacts might have been used. Grade 5 students also experienced what a day at school would have been like in the past, playing games that Canadian school children would have played during school recesses and engaging in a simulated drill and memorization lesson. During this lesson they followed the more rigid rules and routines of the time, such as standing to speak or being sent to sit in the corner for rule infractions such as speaking out of turn.

The learning stations were implemented one afternoon per week. Our students taught for the first hour and a quarter, until recess. During recess we met with the cohort in the school library to debrief and to revise learning station activities for the following week. When possible, the principal and teachers also came to talk to our education students about their lessons and the children's responses to the activities.

Assessing an integrated course: Assignments

With the integration of the content of our university courses, we also had to redesign our approaches to assessing students' skills and understandings. Our goal was to create assignments that were learning experiences in and of themselves, while at the same time requiring our students to demonstrate how they understood the theoretical content in relation to their field experiences. We developed assignments that we think are authentic performance tasks—that is, tasks that teachers need to perform as part of their work. Because understanding the nature of these assignments provides a clearer insight into how we integrated our courses and how we integrated theory with field experiences, we include below a brief description of the tasks we set for students.

Curriculum analysis: This assignment required students to reflect upon and analyze the provincially mandated curriculum documents for language arts and social studies by answering guiding questions, using their personal judgments backed with detailed explanations and specific examples drawn from the documents. Students were given the opportunity to discuss their ideas in small groups, but the written analysis submitted for assessment was done individually.

Lesson plan, teaching, and reflection assignment: Education students, working in teams of three or four people, were required

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Table 2 **Course Outline**

The Minds: Whom are we teaching and how do they learn?

- Theories about how children learn, including:
  - Language acquisition and development
  - Theories of literacy learning
- Learner diversity
  - Understanding multiculturalism and alternate perspectives
    - Understanding personal presumptions
    - Creating inclusive classrooms
    - Communicating across differences
    - Culturally responsive teaching
- Taking into account the multiple identities of individuals, including:
  - Personal characteristics
  - Aboriginal perspectives
  - Immigrant and global ethnic perspectives
  - Perspectives of other diversities [i.e., class, gender, sexuality, abledness, etc.]

The Matter: What are we teaching/learning? Why are we teaching/learning this?

- What is Social Studies?
  - Social Sciences; History & Geography
  - Current Events
  - Citizenship Education; Environmental Education; Global Education; Peace Education
  - Critical Thinking
- How is Social Studies knowledge structured?
  - Facts, Concepts, Skills, Attitudes/Values
- What are the interrelationships among the Language Arts?
  - Speaking, Reading, Writing, Listening, Viewing, Responding
- Communicative competence
- Classroom language: characteristics & purposes
- Talking and learning
- Talking to learn across the curriculum—classroom inquiry
- Creating an inclusive curriculum
  - Aboriginal content and knowledge
  - Immigrant and global ethnic content and knowledge
  - Other diversities' content and knowledge [i.e., class, gender, sexuality, abledness, etc.]

The Tools: How do we teach this *matter* to those *minds*?

- Teaching in cross-cultural and intercultural environments
- Teaching and learning strategies [examples]
  - partner work
  - group work
  - conferencing
  - literature discussion groups
  - readers' workshop
  - debates
  - historical inquiry
  - field trips
  - concept formation strategies
  - metacognition strategies
  - simulations
  - graphic organizers
  - survey research
  - the I-search
- Educational drama/Education through drama (storytelling, role-playing, readers' theater)
- Resources for teaching and learning (resource-based learning approach)
  - Children's and young adult literature
    - personal growth and development
    - resource for learning in the language arts
    - resource for learning across the curriculum
  - Non-fiction resources, primary sources, autobiographies & memoirs
  - Audiovisual materials (including the Internet), kits, games, maps, globes
- Critical perspectives related to resource selection and assisting children in becoming critical consumers of information

Assessment: How can we know if the *minds* learned the *matter* using the *tools* we chose?

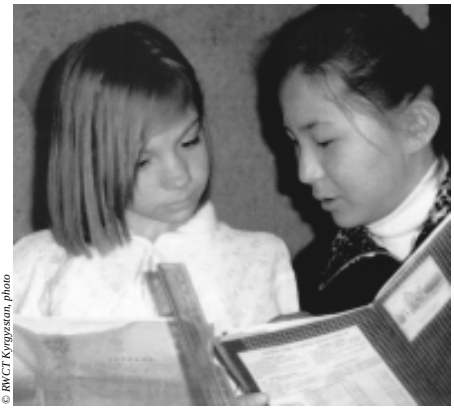
- Purposes
- Techniques
- Backward design approach
- Principles of a*uthentic assessment*

to create an integrated lesson plan for their learning station, designed for the groups of learners they would be working with in their field experience. We asked that the lesson plan incorporate one or more of the instructional methods we discussed as part of the course, and also indicated that it must address a social studies concept or topic using the skills and processes of language arts. Our students were given the opportunity to implement the lesson plan with different groups of young learners, to reflect on the implementation, and to make modifications as necessary for the next implementation. The assessment comprised the original lesson plan, written reflections about its implementation, and written indications of how the lesson plan was modified after each implementation.

Contexts, annotated bibliography, and companion ideas: This assignment was designed to assist education students in understanding the *resource-based learning* approach and the preparatory work that must be done prior to creating an integrated unit. Resource-based learning involves teachers in using—and encouraging students to use—a wide variety of resources to gather, analyze, evaluate, and synthesize information. We required our students, working individually or in groups, to compile and annotate a bibliography of fiction and non-fiction, print and non-print resources; and to gather ideas for activities that could be used to explore the social studies topic they were exploring in their field experiences. The annotated bibliography and a written description of suggested activity ideas were submitted for assessment.

Mini-unit: For this assignment our students were expected to use their annotated bibliography and activity ideas to develop a coherent sequence of nine to eleven integrated lessons exploring an aspect of the concept or topic they were addressing in their field experience. We expected the overall objectives of the mini-unit, as well as the objectives of each lesson, to address both social studies and language arts content and skills. We also required that lesson activities and assessment approaches include speaking, reading, writing, listening, viewing, and responding.

Field experience portfolio: Students were expected to create a portfolio that included records of their observations during their field experiences, reflections on these observations, reflections on the implementations of their lesson plan, a final reflection on field experiences, and an overall reflection, which required students to consider what they had learned through their entire experience, i.e., the university classes combined with field experiences.



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We endeavored to make links between the assignments—we tried to ensure that tasks performed in completion of one assignment were of benefit to, or linked to, completion of another assignment. We think that this strategy supported an overall sense of coherence.

Issues and challenges

While we remain deeply committed to this type of interdisciplinary, alternate approach to the teaching and learning of social studies and language arts, several issues and challenges arose. Some of these were practical challenges that we faced as course developers and instructors, while others were related to the perceptions of the adult learners with whom we worked.

First, it must be acknowledged that as course developers and instructors, we had to commit extra time to our teaching duties as a result of our decision to adopt this approach. This additional time was spent in planning, preparing, and redesigning our course and assignments; in recruiting volunteer teachers and meeting and planning with them; and in team-teaching and assessment. Secondly, while we wished to provide students with practical experiences in a variety of representative classrooms, the need to call upon volunteer teachers meant, in this case, that we ended up working with exemplary groups of children (including several members of the Academically Talented program). Finally, we must caution that using alternate approaches to teaching and learning—especially those that involve

collaboration of several individuals—requires fluidity and flexibility. For example, we had expected that volunteer teachers would select a *conceptual* focus rather than a *skills* focus as their topic. When the Grade 5 teacher proposed a skills focus, we had to adapt the in-class preparatory brainstorming activity we had planned to accommodate the groups of education students working with this topic. Also, while we had sequenced the learning experiences we planned to offer our undergraduate education students, and developed a weekly schedule for the term, we often revised our plans due to logistical changes (e.g., one of us absent due to an unforeseen invitation to speak at a symposium) and in response to students' needs (e.g., students wanted more time to explore ideas or to clarify assignment requirements). No matter how much time is spent predicting and planning, unexpected situations arise, resulting in necessary adaptations.

There were two main issues or challenges arising from the students' perceptions of the course. First, some students expressed the concern that we had uneven or inconsistent expectations for assignments. We think this problem arose because there are always glitches to be worked out when newly developed assignments are introduced, e.g., processes, instructions, directions, and expectations regarding timing. These difficulties can only be addressed as the assignment unfolds. Sometimes our students contacted us individually to ask questions regarding these glitches and, although we believed we had worked out common solutions to the problems, we each responded in slightly different ways to their queries. This may be why students were left with the impression of inconsistency. Secondly, some students expressed the perception that our attention to social studies over-powered English language arts. We speculate that this impression may have been formed because students have the sense that *facts and concepts* content overrides *skills and processes* content. We hypothesize that some students perceived an imbalance because we emphasized that their lesson plans must address a social studies concept or topic using the skills and processes of language arts, and that this social studies concept or topic should also be the focus of other assignments. We can address this issue by helping education students develop the understanding that skills and processes, including the language arts skills and processes of reading, writing, speaking, listening, viewing, and responding, are aspects of content that are no less important than concepts and facts.

Strengths and successes

Despite the logistical and perceptual challenges, the strengths and successes we experienced and observed convinced us that our efforts had been worthwhile.

First, students garnered insights into interdisciplinary approaches through living an integrated experience within a university course. Too often in teacher education, subject integration is discussed as an abstract, theoretical notion, which seems impractical to adult learners who have spent many years in educational settings that stress disconnected disciplinary learning. By participating in our integrated course, and completing integrated assignments, students experienced the notion first hand. In addition, they were required to develop a hands-on, practical understanding of subject integration, through planning and implementing learning station activities for younger learners.

Second, the education students were able to engage in a low risk initial teaching opportunity. Although we did evaluate the written lesson plans they developed for their learning stations, we did not judge or evaluate the teaching itself. In addition, the students were able to support each other as they implemented their lessons because they worked in groups. The students conveyed their delight in having the opportunity to engage with young learners during their first term in our program.

Although we did not initially plan that our students would teach their lessons multiple times, the learning stations idea provided an exciting opportunity for

education students to implement a lesson, to adapt it based on their observations of learner diversity and responses, then implement the revised lesson and adapt again, as necessary. This revision proved to be a powerful experience. While we always discuss the notion that lesson plans require constant modification in response to student reactions, the opportunity to see this process in action is rare. Student teachers expressed their surprise at the discovery that their lesson plans were not perfect even after the first revisions, and they ultimately realized that their lessons would always need adaptation to respond to the needs of different student groups.

Another benefit was that the students were able to gain direct experience with a multi-ethnic school population. While we worked in academically exemplary classrooms, the participating school is located in a neighborhood that has attracted immigrants from many nations. This meant that our theoretical discussions about dealing with diversity became real, as students had the opportunity to meet and work with learners from a variety of cultural backgrounds.

We are also pleased that our approach helped in promoting and developing good relationships with the principal and the volunteer teachers. The principal and teachers were very positive about being involved in the planning sessions and were happy that university faculty members were present to support the education students during their teaching experience. The volunteer teachers have indicated their desire to participate again in following years. We were excited by the creative and committed practice exemplified by the principal and volunteer teachers.

Finally, we benefited personally from this experience. While collaboration does require flexibility and fluidity, we value the opportunity to work together, to share ideas and observations, to be inspired by one another and to share the workload—even evaluating assignments was enjoyable when we worked as a team.

Despite the issues and challenges that arose, we think that our experiment with an alternate way of engaging education students in theory and practice was successful.

Photo from the authors' archives

The opportunity to engage with "real live" teachers and learners led to some pleasant surprises for us and for our students. The integration of our courses using the big idea, *planning for instruction*, and clustering our content into the categories (the *minds*, the *matter*, the *tools* and *assessment*), along with the opportunity to engage in an early practical experience, provided our education students with a powerful and coherent learning experience that promoted praxis.

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Knowledge Is Not a Droplet Infection — It Can't Be Transmitted Through the Air …

Interview with Victor Tslaf, Director of the Samara Business School (Russia)

Photo from V. Tslaf's archive

The idea for this interview originated from our desire to clarify one of the so-called "difficult terms," which have been perplexing the editors and translators of our bi-lingual journal for years: **pedagogical** *(or teaching, or educational)* **technologies***. In English the term usually refers only to technical improvements (hardware and/or software) applied to education (cf. web-based educational technologies, videoconferencing technology, etc.). In Russian, however, the term* pedagogical technology *is used in contexts where English might use the terms* teaching method *or* teaching process; *or* educational system *or* approach. *In other words, the Russian term refers to teaching approaches that have nothing to do with computers or any other technological achievements; the second part of the term indicates only that these are well-elaborated approaches, with fully thought through rationales for practice and a suggested set of methods (for example, the RWCT approach—Reading and Writing for Critical Thinking—known to many of our readers). Such approaches, however we choose to describe them, are gradually gaining momentum worldwide and thus warrant our attention. Time will tell whether the two languages will some day coin a common term that would be appropriately clear in both. Meanwhile, our editors,* ***Alison Preece*** *and* ***Natalia Kaloshina****, decided to consult someone for whom* pedagogy *and* technology *would be equally familiar working concepts:* ***Victor Tslaf****, Director of the Samara Business School, and Director of the Samara Research Institute of Regional Economic Problems. Dr. Tslaf is a methodologist, which implies, as he puts it, "making interdisciplinary connections and creating methods where there is a lack of them." He not only answered the main question that initially caused us to approach him, but also offered us a fresh, unexpected perspective on methodology.*

N.K.: ***Dr. Tslaf, in your opinion, how appropriate is the term*** **pedagogical technologies,** ***currently used by Russian educators to mean*** **highly rationalized teaching approaches*****? Is technologization of the teaching process possible at all?***

V.T.: To answer this question, we first have to analyze the correlation of the two constituents of the term, *pedagogy* and *technology.* If the concepts are compatible, then the term is meaningful and makes sense. If not, then it is no more than a meaningless verbal construction.

N.K.: ***So we are going to split the term in two and consider both parts separately?***

V.T.: Quite so. *Technology*, in a primary sense, is a rigidly set sequence of actions, which, when applied to a preset starting material, allows us to obtain some preset product. The notion *technology* is akin to *algorithm*—technologies possess all three characteristics that are attributed to algorithms: *determinacy, replicability,* and *effectiveness*.[1] Determinacy means that the sequence of actions is predetermined, leaving no choice for the performer, unless the choice itself is an element of the process. Replicability is a property that allows for repeated use of the same technology, in identical situations, in order to obtain the same product. Effectiveness means that if you follow the system and perform a certain (always definite) number of procedures, you are guaranteed to obtain a product of a preset quality. Moreover, a technological system assumes that both the starting material (raw materials, initial data, etc.), and the means of activity correspond to an established standard. Therefore, *systematization is always associated with standardization.*

A.P.: ***So far, what you are talking about seems infinitely remote from the realities of teaching…***

V.T.: You are perfectly right. Technology describes, in the first place, actions with material objects, performed to obtain a product or energy. However, as time went on, in Russian the concept of technology broadened to include actions aimed at obtaining, communicating, processing, and storing information. Teaching also has to do with the transfer, storage, and processing of information. This accounts for the appearance of this new term—pedagogical technologies.

[1] See, e.g.: Aizerman, M.A., et al. (1963). *Logics. Automatic Machines. Algorithms* (in Russian). Moscow: Fizmatgiz.

N.K.: ***And how would you define its first component, pedagogy?***

V.T.: Strange though it may sound, since pedagogy has been around for many centuries, I'd say that the subject matter of this science is not yet clearly defined. Among modern educators, we find very different understandings of what they are doing and why. Often different teaching approaches coexist even within one school.

The classical paradigm of teaching, still shared by many educators, is "we give our students knowledge," or, in its fuller version, "knowledge and skills."

According to a more modern concept, education is guiding a student's development. What sort of development? Development of what? Here again we get a wide range of answers. The broadest and most vague of them is *development of personality*. Then comes *development of thinking*. And there are many other definitions, and much has been written about the content and process of this development.

Lastly, the modern pragmatic or competence-based approach: We create opportunities for our students to engage in a wide range of practical activities, or, on the contrary, a narrow range of selected areas. The wide range is associated with general education, and the narrow range with professional education.

A.P.: ***Which of these three conceptual frameworks do you find most acceptable?***

V.T.: Let's begin with the one that I'm not willing to accept, the simplest one: knowledge transfer.

What is knowledge? Again, centuries of study in the field of epistemology have provided no single answer to this question. So we shall not try within the framework of our interview to do the impossible—let's focus on a few basic points.

From the moment of birth (we'll leave aside the possibility of prenatal cognition, although this question is raised by some experts) a person is getting to know the surrounding World, and his or her conscious mind reflects this World. This reflection is not created automatically, but as a result of the individual's cognitive or investigative activity. The content of our consciousness that we call *knowledge* of the World is in fact an abstract, essentially incomplete, and approximate reflection of the World.

N.K. ***Why incomplete?***

V.T.: Because this reflection is created as a result of our cognitive (investigative) activity, which forms idealized images in our minds of the objects found in reality, through a process of abstraction from the many properties of this reality. As we continue to investigate the World, we can supplement these images and make them more precise, but our knowledge will never become absolutely full and authentic, since our cognitive activity will always be based on abstraction—and abstraction necessitates ignoring many concrete properties of the real objects.

N.K.: ***Is this true of cognitive activity in general—or more particularly of knowledge that is formed in the teaching-learning process?***

V.T.: It's true of any knowledge. However, while humanity in general can construct

Victor Tslaf's fields of activity

Technical cybernetics; application of electronic devices; mathematical and cybernetic methods in medicine; theoretical and normative metrology; metrology in testing and analytical chemistry; metrological assurance of production; professional development planning for managers and specialists; business theory and design; management theory and methodology; research and practical work in the systems of higher education and professional development; development of *free type games* (analytical innovative sessions) and their implementation in consulting and education; strategy consulting; and theory and practice of regional development, including the elaboration of complex programs of territorial development. He has achieved significant results in all these spheres; in particular in education, Dr. Tslaf is the author of an integral educational approach, the Concept of Adaptational Business Education, which has been both theoretically elaborated and practically implemented at the secondary school and professional education level. This approach involves humanitarian education aimed at helping students adapt to life and activity in constantly changing social, economic, legal, and cultural conditions. The main focus of Dr. Tslaf's activity in all spheres is *methodology*, the construction of general methods of problem solving in corresponding fields of theory and practice.

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During the interview. from left to right: Victor Tslaf, Alison Preece, Natalia Kaloshina

idealized cognitive constructs only through direct experience, there is another path for individuals: through communication with other people.

N.K.: ***As in teaching and learning?***

V.T.: Including teaching and learning. But can individuals acquire *integral* images through communication? No, they can't, because all images are interconnected by their meanings, and these connections are unique for each person. The aggregate of realized cognitive acts is unique for each individual—hence, the mental objects and their connections are unique too. In communication we receive information, and this information becomes linked in some way to what is already stored in our minds (This is the principle known to educators as *apperception*.)

A.P.: ***And what if it is not linked?***

V.T.: If new information fails to connect with previously constructed images, it can still be stored in memory, but it forms new objects that also are not linked with the previously constructed ones—and then consciousness is deprived of integrity, taking the form of isolated concepts. The modern education system, with its organization of the curriculum by subject, and poor interdisciplinary connections, exacerbates the challenge of building integrated, coherent systems of knowledge.

So, coming back to the knowledge transfer approach: Knowledge is not a droplet infection— it can't be transmitted through the air, or through teacher-student contact. Information is transferred, but we don't know beforehand whether the student will or will not be able to use it in constructing his or her own unified body of knowledge, and no one is even assessing this result in a subject-centered curriculum. We can only check for memorization of information and to see whether meaningful links have been formed with the nearest blocks of information, from the same or related disciplines.

One can supplement knowledge by adding new concepts to its structure or by connecting the old ones with new links—if such additions do not contradict the existing structure of the knowledge. However, individuals need to be motivated to make such additions… and, as any teacher can tell you, motivating students to learn is not always a straightforward proposition.

Knowledge can also be *developed.* In this case existing links are replaced by new ones, and the existing knowledge is restructured. But here, too, motivation is needed—and again it's a problem that cannot be solved within the knowledge transfer approach.

The motivation for knowledge development comes from problematization. It arises when a person is unable to resolve some concrete situation using only their existing knowledge. In the classroom, a student searching for a solution may make use of information received from the teacher, but this information needs to be processed if it is to be transformed into knowledge. Development of knowledge is definitely not the transfer of knowledge from teacher to student. It is a fundamentally different process, which requires reflection and thought, and it is dependent upon the individual student's initial level of knowledge, which is unique in each case.

Thus, we have to admit that the knowledge transfer framework proves untenable. But this does not mean that *teaching* to support the construction of new knowledge in students is impossible—only that it cannot be reduced to "knowledge transfer." It involves *development* of students' knowledge through a process of reflection and thinking, in the context of opportunities for creative problem solving offered by the teacher.

A.P.: ***And so what are the implications of this for "thinking development"?***

V.T.: First, the development of thinking, like the development of knowledge or any other development, requires problematization, which can only arise from an individual's inability to resolve a particular situation. Second, any development is a process of transition to a new state or level, conditioned not only by the steps taken in this direction, but also by the initial starting point. Third, development of thinking implies the development of the ability to find new approaches to situations, moving beyond existing rules and approaches.

A thinking individual should be able to perform a number of intellectual operations:

- *investigate* the situation, i.e. identify its basic, essential properties, in order to be able to predict how it might change;
- *analyze* the situation, i.e. find the contradictions (problems) that are preventing him or her from reaching the desired goal using the available means;
- *resolve* these contradictions, thereby transforming problems into feasible tasks;
- *envision* the desired state of the situation, i.e. set *goals*;
- *plan* actions to achieve the goals.

Thinking, therefore, is a process of reasoning (discourse) that allows an individual to generate new knowledge that will guide him or her in accomplishing certain tasks. By the way, existing procedures may be entirely adequate for accomplishing some tasks, provided the methods suit the particular situation. Thinking comes into play only when the situation cannot be resolved within the available framework of knowledge. The starting point for thinking is information obtained on the basis of *reflection* on the situation and *communication* with other individuals[2].

To cope with the above tasks, a thinker has to possess both *methodological* knowledge and the skills to apply it in the construction of new knowledge regarding what actions would be possible and effective in a given situation. And we can *teach* students these methods and these skills.

A.P.: ***So how would you characterize such teaching?***

V.T.: Basically it involves three things, which follow from the essential characteristics of any development process:

1. Creating problem situations, never before encountered by the students, that can be resolved through reasoning (discourse), and that require recognition of the limitations of the available knowledge;
2. Considering the initial knowledge and thinking level of each individual student;
3. Teaching students both methodological knowledge and the skills required to apply it.

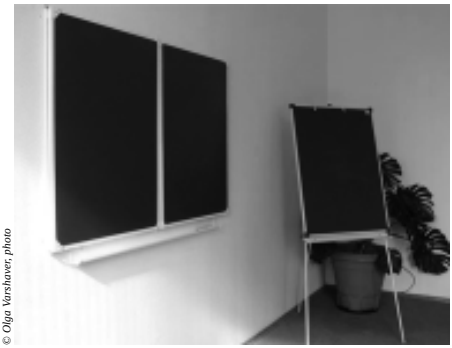
As you can see, both the knowledge transfer and the development of thinking approaches are based on the assumption that the development process needs to be organized.

N.K.: ***And the above-mentioned competence-based approach?***

V.T.: This approach implies different requirements for the content of the teaching process, but not for how it is implemented. Clearly, the development of knowledge and thinking is essential for this third approach too... However, we have to come back to *teaching technologies* [methods]. As we have just seen, the situations that foster creative problem solving, as well as the initial level of knowledge and thinking skills, are unique for each individual and cannot be standardized. Hence, *the characteristics of teaching revealed in our analysis, on the one hand, and the requirements inherent in technologies—determinacy, replicability, and standardization of means and materials—on the other hand, lead to a contradiction.*

N.K.: ***Meaning that the Russian term* teaching technologies *lacks terminological coherence?***

V.T.: Quite so. In the literal sense of the word—as it is used in other fields—pedagogical *technology* is not possible.



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[2] See: Shchedrovitsky, G.P. The scheme of thinking activity: System-structural pattern, meaning, and content. In: G.P. Shchedrovitsky. *Selected Works* (in Russian). Moscow, 1995, pp. 281–298.

A.P.: ***What then is the implied meaning of this increasingly popular term?***

V.T.: I think, our use of *teaching technologies* can be understood as:

- A statement of the main principles of a particular teaching approach;
- A step-by-step description of the implementation of these principles;
- A tool box, with which an educator, acting according to the *situation* and considering the *characteristics of particular students*, will more likely attain the aims of this teaching approach.

What is important here is that teachers who take it upon themselves to implement these "technologies," should not merely be trained specialists, but *thinking and/or creative professionals*. Mastering any rationalized approach to education requires the personal and professional development of teachers.

A.P.: ***One thing that often worries me (professionally... as someone who works in the preparation and professional development of teachers) is the apparent absence in many teachers of an internally coherent or even explicitly articulated theory of practice… i.e. the* why *of what they do. I don't mean in terms of simply embracing or aligning themselves with one of the theoretical positions that are out there but of fully thinking through the rationale for how one approaches teaching. I hear people claim to take the best wherever they find it... but I am concerned when this is done without any methodological basis.***

V.T.: I can read at least several questions in what you are saying... No system in one's work, no theory, no understanding of the mission or even the goal of one's activity, no methodological basis—these are all different things, although they may probably have the same explanation.

According to Max Weber, one of the founders of modern sociology, social action, like any other action, may be: "(1) goal-rational, i.e. determined by external expectations concerning objects or other people's behavior, and, through these expectations, by a rational judgment concerning both the situation and the means to attain the goal; (2) value-rational, i.e. resulting from a conscious belief in the absolute (inherent) value of a particular course of action, irrespective of the outcome of this behavior and whether the value is interpreted as ethical, aesthetical, rational, or other; (3) affective—affect-driven or guided by emotional states; (4) traditional—guided by custom or habit."[3]

Goal-rational behavior, which implies an understanding of mission and goal, as well as a theoretical and methodological basis, is a rare occurrence.

And we'll leave out affective behavior. Its causes are diverse and multiform—very often it stems from stressful conditions or cultivated permissiveness—but I don't think this is what you have in mind…

Value-rational and traditional behaviors, however, are very common. They have the advantage of saving people's energy. Value-rational behavior does not presume conscious goal setting, or a deep understanding of the mission: We act according to our *beliefs*, perceived absolutely and uncritically.

N.K.: ***What does value-rational behavior look like in practice—say, in the work of a schoolteacher?***

V.T.: Take for example, the ubiquitous phrase, "we must develop our students' thinking" (as a duty of all modern educators)—This is just ideological dogma. "Why develop it, for what?"—"What difference does it make? Wiser people have already thought of it." Hiding behind authority is one of the most common ways to mask one's own laziness or incompetence. There may be other explanations too, including inferiority complexes or just simple-mindedness: "Why develop thinking?"—"Is it even possible not to?"

Another question is: *How* should we develop thinking? —"Here we have recommended guidebooks, it's all in there." Or else we may, as you've just said, "take the best wherever we find it" and use it in our own teaching. But techniques taken from *different* teaching systems sometimes turn out to be incompatible with each other, though there may be no cautions about this in the recommended guidebooks. So being eclectic often comes down to being chaotic in one's teaching, which is hardly what we were after.

N.K.: ***And traditional behavior?***

V.T.: Traditional behavior is when we follow set routines without consciously interpreting our own actions, when we behave "as usual." And since it helps us save energy in the course of our activities, it's the most widespread type of behavior. Habitual

[3] Cited from: Parsons, T. (2000). Structure of social action. Ch. 17. Max Weber: Systematic Theory. In T. Parsons, On the structure of social action. Moscow, pp. 157–158.

routines are most often formed either by borrowing action patterns from the social environment, or by repeating actions that have worked for us previously. Such behavior does not usually lead to a search for new methods…

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N.K.: ***Why do you think these two types of behavior—value-rational and traditional—continue to be so widespread in the teaching profession, where the understanding of mission, goals, and methods are so important? What can be done to change this situation?***

V.T.: The trouble is that we have *teacher training*, instead of a *teacher development* system. Trained teachers teach as they were trained—and for most of them, development was not part of their training. They ignore problem situations and tend to act in any situation as they were trained to act. Moving along in their careers, they don't encounter situations where they need to seek out novel ways to respond to the issues—which in fact is the essence of the problem situation.

I don't mean to cast aspersions on teachers here. It's just that teachers are trained, instead of being developed, and and that's their trouble, not their fault.

It's easier to train than to develop. But there is one simple truth: If I do not develop myself, *here and now*, I cannot develop others. If I have set up a problem situation for my students, but I myself know the solution, the students will never believe it's a real problem. And they won't look for a solution; they'll look for an opportunity to ask me the solution. A problem situation has to be a problem for both students and teacher. Then the process of *co-development* will be a process of education, not just training. But this may prove discomforting and discouraging. And there is always the risk that you will be unable to cope with the problem in front of your students, and not all teachers are prepared to take such a risk.

As for what can be done to change the situation… We have just touched upon a whole spectrum of issues concerning *teacher education*. Successfully addressing these issues will create a *development-oriented professional environment* for teachers and will provide motivation for them to develop themselves and their students. Only then will we be able to speak about the need for—or rather a demand for—a methodological basis for teaching.

A.P.: ***What do you understand by* methodological basis*?***

V.T.: First, the methodology of any sphere of activity cannot be constructed from the material of this same sphere of activity. You can't build a house on its own base, houses are built on the ground, and the base is a part of the house that rests on the ground. Archimedes knew that in order to move the Earth, one would need a fulcrum, and this fulcrum would have to be beyond the Earth. Only Baron Münchhausen succeeded in pulling himself and his horse out of the swamp by his own hair. Many sciences try to build by Münchhausen's principle instead of Archimedes'—basing their methodology on their own content...

Thus, methodology of pedagogy cannot be constructed on its own content material. *It has to be built outside pedagogy*. This doesn't mean it must be imported from somewhere else—teachers can accomplish this task themselves, but by assuming the role of methodologists.

Second, methodology is about creating and using methods. Where are all methods created and used? In human thought and action. Hence, *general* methodology should be created as a general theory of thought and action. Specialized methodologies related to particular spheres of activity—such as the methodology of education—can only be based on such general methodology. This type of general methodology was created in Russia by the outstanding philosopher Georgy Shchedrovitsky (1929–1994) and his team, who also made a significant contribution to methodology of education. But in the Soviet times their findings were at odds with the communist ideology, and as a result they have only recently begun to be

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published. Anyway, the papers of Shchedrovitsky and his followers do not contain a complete methodology of education. So we could say that for now, the lack of an integral methodological basis is not simply a problem encountered by individual teachers; it's a challenge to the science of teaching as a whole.

A.P.: ***What do you think may be the consequences of disregarding methodology in the teaching profession?***

V.T.: As in any other activity, neglecting methodology results in poorly formulated structures for action; the chaotic accumulation of different methods and techniques, which sometimes support one another but too often interfere with one another; eclecticism instead of synthesis; avoiding problems that are difficult to solve; formulating pseudo-resolutions and wasting huge amounts of resources on obviously fruitless attempts to implement them; enslavement to fancy language and populist slogans.

In recent decades, a great many talented people in all parts of the world—including Russia—have joined the teaching profession, people who have much to offer and who have made many invaluable discoveries on a purely empirical basis. But no sphere of activity, including teaching, can survive exclusively on talent. Frankly speaking, there are as many mediocre people in the teaching profession as in any other, and we can hardly expect this situation to change in future. For these people, it's always good to have very definite methodologically based recommendations—so as to minimize the potential harm from their activity.

N.K.: ***Of course, the ideal is unattainable in reality, but striving for it often propels us to move forward... What is for you an "ideal" teaching approach? What important points should be included in its development?***

V.T.: The ideal approach to teaching, extrapolating from what I have said so far, is an approach that promotes development through creative problem solving, reflection, and thinking. But in reality such an approach is neither realistic nor necessary in all cases. We won't be able to discuss the *mission* of education in this interview, but it is an extremely serious issue. The humanistic view that we should provide for the thorough and comprehensive development of every individual is, of course, attractive, but when this thoroughly developed individual has to become a janitor or work on an assembly line, he will hardly be grateful for his well-rounded education, which has equipped him with unrealizable social ambitions. Social stratification is a reality; moreover, it is a reality that is necessary for the development of society. Therefore, society needs different "products" from teaching and, accordingly, different teaching approaches. *These social needs must be taken into account when developing systems of education*—but this is, again, a separate topic for discussion, equally concerned with the development of education and society. The tragedy of a person who has no opportunity to realize his or her acquired potential is as serious as the tragedy of someone who does not have access to decent education.

N.K.: ***What are the underlying principles of your Concept of Adaptational Business Education?***[4]

V.T.: The underlying notion of the Concept is that of *adaptedness*, which denotes the degree of a person's independence in providing resources for his or her own life and activities. Adaptedness is achieved on the basis of self-determination and development. The adaptation process includes socio-cultural, social, and psychological components.

The Concept includes a detailed consideration of the teaching/learning process, professional training, and humanitarian education. According to the Concept, the goal of education is *to acquire the potential to act in the World by transforming oneself and the World according to one's system of values*. An education focused, above all, on

[4] Those who are interested in the Concept or its implementation or would like to ask Dr. Tslaf any other questions can contact him directly at Samara Business School via email: sbs@samaramail.ru

acquiring the ability to understand and change *oneself* is a humanitarian education. In this process the World (the *non-self*) serves as the context for self-transformation. The contrary approach—the technocratic one—is directed toward changing the World, with the *self* seen as the agent of this change. The ability to change oneself within one's *value system* regarding the World is sufficient to enable one to change the World. Humanitarian education is true education—the rest is merely professional or specialist training, aimed at attaining functional literacy in a certain sphere of activity according to a certain World standard. If the real World deviates from this standard the specialist finds himself in a position of functional illiteracy and requires retraining.

I believe that one major achievement of the Concept is a detailed analysis of business, which is understood not as not as an economic and legal phenomenon, but as a special type of thinking and behavior and a special lifestyle that provides for full adaptation to any environment and steady development throughout one's life. The Concept presents a synthesized image of business as a specific type of human activity. The *credo* of the person involved in this activity includes four vital principles. These are, in short: *live and work in a way that will continuously increase your opportunities; create your own opportunities; maximize your available resources, finding a reasonable balance between profit and risk; coordinate what you desire with what is possible*.

Synthesizing the elaborated notions of education and business allowed for a well-defined concept of business education.

N.K.: ***Did you manage to implement your ideas?***

V.T.: The Concept of Adaptational Business Education was realized in part in 1992–95 in the Samara Business School's work with the unemployed (whom we helped to start their own business enterprises), and more fully in 1992–2001, in work with secondary and high school students (adaptational business education).

N.K.: ***What were the results?***

V.T.: Speaking in the language of facts and figures, the usual success rate of education for the unemployed—both in and outside Russia—is about 30 percent. In other words 30 of 100 unemployed citizens start their own business after taking courses in business training centers. In our case, the "effective yield" was 250 out of 256 people, that is, over 97 percent.

Our work with school students was also shown to be highly effective. We worked in districts of the city that had high unemployment rates and, on the whole, a low standard of living. We began our work with a two-year cycle (grades 10–11), and then moved on to a four-year (grades 8–11) and a seven-year cycle (grades 5–11)—which, in some years, amounted to 400 students. According to our data, all the graduates of our 1994-99 business classes who wished to continue their education in universities or other educational institutions (more than 75 percent) succeeded in doing so.... I can't say, however, that the Concept has been completely realized. First, our work with school students (except for children from an orphanage) was not financed either by the state or outside sponsors. The only meager funding came from the parents, who were mostly hard up themselves. But the basic problem was, again, methodological—the teachers' previous training had not prepared them to accept the suggested approach, and we did not have the resources to provide them with opportunities to fully explore the new concepts.

But turning to my teaching experience outside the Samara Business School, I can say that the Concept's basic principles are being successfully implemented, in particular with students at Samara State University, in my courses on management theory, marketing and business, and others. For me, creative problem solving and reflection are inherent parts of the teaching-learning process—including my lectures, which

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often turn into discussions. The Concept's principles are also realized in an active strategy that I developed and use in my teaching—reflective analytical workshops. It is based on game theory, but that's a topic for a separate discussion.

A.P.: ***What role do you assign to interdisciplinary connections?***

V.T.: I think that it's time to reconsider the nature and role of these connections in education. Traditionally, interdisciplinary connections have been built solely on the basis of common object schemes (for example, the traditional links between literature and history, where the same historical events are often studied from different angles). But I believe that there is another equally important approach: Research and use of interdisciplinary connections based on commonality of *methods*, common approaches to organizing thought and activities. This path has scarcely been explored in current education, but in terms of the goals of humanitarian education it has tremendous practical value.

Often different disciplines deal with the same aspects of the students' worldview, but the essential common perspective of these issues is lost among the details. Here is just one example. In their language classes, Russian students (sixth-graders, if I am not mistaken), are introduced to the concept of *word combination*: They learn that a combination of words (*writing table*) enables the speaker to define an object more precisely than a separate word (*table*). In the same year, in math, students study rounding of numbers—and again there is the issue of degree of precision: More precision is attained by the use of more characters (in this case numbers rather than words). However, the meaningful connection between these two phenomena is not established, even though they have much in common in terms of both their content and formal logic. Thus, the students miss an opportunity to understand through simple examples an extremely important concept, taught only in some universities in courses on information theory: *More characters are required to express greater precision.* Moreover, there are major inferences for everyday life that follow from this understanding, for example, that it's impossible to describe complex objects in simple terms. As a result of such "unconnected" learning, students tend to believe glib politicians who claim to offer simple solutions to complex problems—and the like. Coming back to the above example, we can see that language teachers are concerned about relations between words, that mathematics teachers are concerned about the rules of rounding off—but that no one appears concerned with helping students construct an integrated *big picture* of related concepts, or with the lifelong practical value that such an integrated understanding could offer.

N.K.: ***Is there an important question that we have forgotten to ask you?***

V.T.: Perhaps whether I consider myself a teacher, and whether I have the right to discuss the issues we have been discussing? I wasn't trained as a teacher, and I felt no connection with the official Soviet pedagogical science (I attempted to study it about 40 years ago). By now, however, my own teaching experience (in the Samara Business School, and other institutions of higher education and professional development) spans more than 35 years, and certain plans and ideas seem to have developed… So the answer is yes, I consider myself a teacher. And what I have been saying here is the result of almost 40 years of theoretical research and practical experience.

A.P.: ***Is there anything you would wish for our readers?***

V.T.: Simple human happiness. Some are lucky to be well-educated and thoughtful individuals, others are lucky not to be… But happiness is what all of us need—so let it be so.

A.P., N.K.: ***Thanks for your kind words. And for the interview.***

Jun-min Kuo

Mime-based Dialogues: A Case Study of Critical Literacy in an EFL English Conversation Class

Photo from the author's archive

***Jun-min Kuo** is an Assistant Professor in the Department of Foreign Languages and Literature at Tunghai University in Taichung, Taiwan.*

Introduction

This study investigates a mime-based dialogue activity implemented in an English Conversation class taught in Taiwan during the 2005 spring semester. It examines this activity through the lens of critical literacy: the socio-cultural aspects of the texts used and created in the classroom are held up for scrutiny and consideration.[1] The purpose of the study was to address the following questions: (1) How did the students respond to the mime-based dialogue activity in the context of a course on English conversation practices, and (2) how did they relate the activity to critical literacy based on their classroom practices?

The participant teacher

The instructor had returned to Taiwan with an American doctoral degree in language education. As a result of the influences and training he had received during his doctoral studies, the instructor espoused the assumptions of critical literacy with regard to its emphasis on social practices and critical interrogation of social dimensions. Moreover, he especially made an effort to incorporate the concepts of critical thinking and writing, two important components under the umbrella of critical literacy from his perspective. The instructor was chosen as a collaborator for my research in consideration of his keen interest and ongoing research in the field of critical literacy.

Students

The class was composed of 26 Taiwanese undergraduates (23 males, 3 females) majoring in Engineering. Twenty-four were third-year students, and two were fifth-year students, at a rural university in mid-southern Taiwan. Students participated in all of the class activities in six groups of four or five. Each group sat together during the entire semester, discussing, creating, and performing a team dialogue at the end of each class.

Mime-based dialogue activity

While attending an Art Therapy congress in Budapest in 2003, the instructor was impressed by a mime performance given by local performers during an evening reception. Remembering the impact of the Hungarian performance, he vowed that when he began teaching, he would use this technique as a way of promoting critical consciousness.

Shortly after he was assigned to teach the English Conversation course discussed in this study, he devised an instructional activity called *mime-based dialogue*, which took place over two consecutive class sessions. This activity was employed in the seventh week of the spring semester of 2005.

In the first session of the activity, the instructor began by describing what he had

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Fig. 1. Getting ready for the mime-based dialogue

[1] Despite the variety of definitions of critical literacy offered by different researchers and practitioners, these definitions generally share a socio-cultural perspective (Green, 2001). To see literacy as a social practice implies that students share a way of living together within a classroom community.

Photo from the author's archive

Fig. 2. LP raises his right hand as if to take an oath

seen in Europe. He then explained what a mime activity is and how it would work in class, describing in English and then in Chinese the mime activity he wanted his students to perform. Two male students, LP and WC[2], were invited to mime in front of the class, and the others were divided into six groups, with four or five people on each team.

The two mime players took turns performing one action at a time. After each action, each of the two mime players individually wrote a description of the action, while each group discussed and then wrote a commonly agreed-upon description. Students in the groups could discuss their work either in Chinese or in English, but they had to write their team dialogue only in English. When all actions had been performed and described, each mime player and each group produced a dialogue based on the mime performance. Thus eight dialogues were created, and the second session of the activity was devoted to practicing and performing the dialogues.

Data collection

Data sources comprised the instructor's journal entries, students' comments on a class weblog, students' midterm reflection papers, and reflective interviews with the instructor and with nine of the 26 students in the class.

- Instructor's journal entries: The instructor kept a journal of weekly reflections about student performances and class interactions. Only the journal entries for Week 7 were used in this study.
- Student class weblog comments: The class weblog was a website where students posted weekly comments on what had happened in class. Only the comments for Week 7, i.e., comments on the mime-based dialogue activity, were considered in this study.
- Student midterm reflection papers: These were concerned with how the students felt about the course, including course materials and activities. These papers were due in the eleventh week of the spring semester, after their midterm examination was completed in Week 10.
- Reflective interviews with the instructor and students: Sometime after Week 10 of the semester, the participant observer in the classroom interviewed the participant instructor and nine students who belonged to two different groups in the class. Interview questions were designed in a semi-structured fashion, allowing individual participants to respond in their own ways.

Discussion and findings

In this study, Luke and Freebody's (1997) model of reading as social practice serves as a useful conceptual framework to determine whether students underwent different stages of literacy development. The model describes four levels of text analysis: (1) In *coding practices*, learners are code breakers who understand how texts work by distinguishing different sounds, marks, and conventions; (2) In *text-meaning practices*, learners are text participants who figure out texts through the texts' schemata; (3) In *pragmatic practices*, learners are text users who understand how texts are performed inside and outside school, and know how to apply texts to given social settings; and finally (4) in *critical practices*, learners are text critics who understand how texts position humans as well as how questions can be produced to solve problems for social change.

This model, with its four dimensions of classroom practices, is used as the theoretical framework in this study to analyze the data collected, particularly to examine whether this mime-based dialogue activity engaged students in the four different levels of literacy practices.

Coding practices

One of the main questions addressed by Luke and Freebody (1997) in terms of coding practices is *How do I crack this text?* (p. 214). Such a notion of literacy as decoding becomes particularly engaging and

[2] LP and WC were the actual nicknames of these two student performers, so their classmates incorporated these two names into their team dialogues, as a reflection of their real lives (Because of different Romanization systems, some students called the first student LP, others LB.).

complicated when the text is not linguistic but a series of wordless actions. According to the instructor, he chose LP and WC as the mime performers in the activity because both students were energetic, outgoing, and active participants in classroom discussions (personal communication, April 24, 2005). When these two were assigned to perform in front of the class, all of the students laughed or giggled because, as one student interviewee said, "LP is nicknamed *Monster Garlic* since he likes to eat food served with a lot of garlic. He has bad breath all the time. He is sick [odd]! He always makes a fool of himself" (April 26, 2005). Although some students thought LP was a class clown, his energy in performing the impromptu actions functioned as a catalyst for the activity and became a focus of class energy. Furthermore, his participation ensured student enthusiasm and creativity.

As an observer in the class, I recorded in my field notes the following description of the actions performed by LP and WC: (1) LP raises his right hand as if to take an oath in front of WC (Fig. 2); (2) WC turns away with a contemptuous look; (3) LP approaches and pats WC on his right shoulder (Fig. 3); (4) WC collapses on the floor in horror; (5) LP reaches out his right hand and approaches WC again; (6) WC flees immediately; (7) LP chases WC (Fig. 4) and touches him on the back; and (8) WC turns around and pushes LP away (Fig. 5). This seemingly simple sequence generated a variety of interpretive dialogues that reflected richness and personal experience. For example, one group came up with Dialogue 1 as shown below, regarding the issue of sexual harassment, after one of the group members (Chris) shared a personal experience in which he was observed in his sleep in the dorm by one of his classmates, which he thought was a kind of voyeurism. The differences between this dialogue and my description of the mime activity as an observer suggest that such a mime-based dialogue activity can help students decode a text or a set of signs beyond the surface meaning of a given text. Students responded in groups or individually to the mime performance and became code breakers; they not only recognized all of the codes in the activity—gestures, movements, and facial expressions—but also used and internalized them to respond creatively and imaginatively. In addition, they brought into the classroom their previous knowledge from school, society, and culture.

Dialogue 1

LP.B: *Hey… Hey… So comfortable!*
WC: *(make a snobbish gesture) Hm. You just a LP. Don't talk to me.*
LP.B.: *Hey! Hey! How much one night?*
WC: *Don't touch me! Don't hurt me! Please!*
LP.B: *Hey! Hey! I need you. I need your love. That's so great.*
WC: *That's so terrible. You scared me! Who can help me? Help! help.*
LP.B: *Ha! You can't escape.*
WC: *Don't look down on me. I can use Chinese Kung Fu! Ha! Ha! I will kill you!*

Text-meaning practices

According to Luke (2000), students bring diverse cultural, community, and linguistic resources to engage in learning experiences with the instructor and other classmates. However, if students develop their resources only as code breakers, the extent of classroom literacy will be limited to coding practices rather than including text-meaning, pragmatic, and critical practices. As discussed previously, the practices implemented in the class not only focused on the individual meaning of each mime action that the students observed, but also employed their personal experiences inside and outside the classroom. This feature can be used to respond to Luke and Freebody's (1997) questions: "What cultural resources can be brought to bear on the text? What are the cultural meanings and possible readings that can be constructed for this text?" (p. 214).

After each of the eight actions was completed, students in groups started discussing what the action meant to them. Although the instructor encouraged students to use the opportunity for more English language practice, students still preferred speaking Chinese. Students came from the same society, and shared similar cultures, and some even lived in the same dorm at school, so common vocabularies and modes of communication occurred during discussions. In addition, these students were engaged in *cooperative learning groups*, because the

Photo from the author's archive

Fig. 3. LP approaches and pats WC on his right shoulder

Photo from the author's archive

Fig. 4. LP chases WC

instructor explained and assigned a task to them, and they worked together, gathered information, and completed the task (Leu & Kinzer, 1995). As a consequence, students' dialogues were mostly based on their own experiences—personal but shared with their classmates as a social community. It is interesting that some of their dialogues referred to a secret code among themselves, as shown in Dialogue 2 below. Without the secret code of LP as a garlic monster in students' daily lives, it might be difficult for the reader of the dialogue to understand the nuances expressed in it.

As mentioned earlier, LP was infamous as a huge fan of garlic in real life. As two of the interviewed students said, when they were asked to make sense of the actions performed by LP and WC it was natural for them to project LP's and WC's personalities into their work:

— *When LP was performing his actions, we could guess, to a great extent, what he might be thinking. We are very familiar with the way he thinks and the way he does [things].* (John, personal communication, May 5, 2005)

— *Our dialogue was based on LP's life, habits, actions, etc.* (Fly, personal communication, May 12, 2005).

As a result, Dialogue 2 is somewhat of an exaggerated portrayal of LP, who liked eating garlic and saying silly things in everyday life, compounded with the victimized figure of WC.

In response to the questions, "What cultural resources can be brought to bear on the text? What are the cultural meanings and possible readings that be constructed for this text?" the comments above suggest that students were inclined to bring into their discussions their real-life experiences and their impressions of people around them. To be more specific, this activity enabled students (1) to create a classroom discourse in which they exchanged and shared their unique experiences as students and classmates and, in turn, (2) to participate in their classroom communities.

Dialogue 2

LB: *I swear that I don't eat garlic.*
WC: *Who believe… Are you kidding?*
LB: *Don't go. trust me.*
WC: *God! So stingy. Don't get close to me. Leave me alone.*
LB: *Are you OK? Garlic is delicious.*
WC: *Shit! I can't stand you anymore*
LB: *Come on.*
WC: *Beat it. Don't touch me. Go to hell.*

Pragmatic practices

Students' reflections on the activity demonstrate that they perceived the mime performance as a new way of learning, an engaging storytelling without words that helped them write their team dialogues more easily and more amusingly than the previous activities.

All interviewed students: *Yes, I liked this activity very, very much!* (April 2005)

WC: *Sometimes we were confused about some actions. Team discussion helped us create our team dialogue and increased our peer relationship… The audience could enjoy watching a mime while completing their tasks.* (Midterm reflection paper)

Mary: *Once, LB and WC played a short mime. It was not bad, I think. It was very interesting to imagine a picture [situation] based on their actions.* (Midterm reflection paper)

Happy: *This mime-play activity was truly intriguing to most students. LB's role was often described using words like freak, abnormal old guy, and devil garlic. Haha, I almost laughed to death this week.* (Weblog quote, April 9, 2005)

Jack: *This week Daniel used a mime performance as the main source for our team dialogue. It was easier than what we had done before.* (Weblog quote, April 7, 2005)

Grace: *I agree with Jack that this way of learning [pantomime] is easier [for us to write our team dialogue] and more flexible for creation, unlike what we are used to doing, which was very, very difficult!* (Weblog quote, April 8, 2005)

The following reasons might account for the popularity of this activity with the students. First, as the instructor indicated, the paired narrative pantomime was a 100% student-focused methodology, because what students performed did not depend on the instructor's expectations (April 24, 2005). The instructor pointed out that this was his first experiment with this kind of performing art in his classroom; he had no idea what the

two miming students would choose to act out or how other students would respond. The suspense inherent in the mime performance made students fully involved with watching and discussing the performance.

Second, the activity was markedly different from the previous class activities, such as reading picture books or listening to hip hop songs, which related to texts that involved primarily linguistic and/or musical intelligences (Gardner, 1987). The mime-based dialogue activity engaged students' kinesthetic intelligence. In brief, the instructor used a student mime performance to create an imaginative and personal world in which each student participated in the process of learning, thus "infusing excitement into classroom exercises by combining dialogue and action" (Burke & O'Sullivan, 2002, Introduction, xiv).

When the nine interviewed students were asked, "Did this activity help you to increase your abilities in critical thinking and critical writing?" all agreed that they had been helped in their critical thinking and writing abilities.[3] However, when it came to their English conversation proficiency, two of the interviewees (Happy and Tony) did not think that this activity provided useful practice. Happy said that he really liked this activity but it did not help him increase his English conversation ability. Tony thought the words and phrases used in the dialogue were too simple, because students were asked to write a dialogue based on eight actions and on their current limited English understanding—all they could do was write down simple words and phrases instead of using new vocabulary words. Additional criticism of the activity is further analyzed below. However, the remaining seven students still felt the activity had helped improve their English proficiency.

Because of different definitions of English conversation, students disagreed on whether this mime-based dialogue activity had helped to improve their English ability. When the students were brainstorming a dialogue after watching the mime performance, Chinese was allowed, in view either of the students' different English levels or their insufficient English abilities. But when students reflected on this activity in terms of improvement in their English conversation

Photo from the author's archive

Fig. 5. WC turns around and pushes LP away

ability, some of them did not think they had spoken *enough* English during group discussions. In their opinion, a good English conversation activity should be one in which students can speak often and use English frequently—a reasonable expectation that merits language teachers' attention.

A second criticism of the activity was that due to time constraints, not all six groups had the chance to perform their dialogues in front of the whole class. Because of this, not all of the students rated this activity highly in English conversation.

The reasons why there was not enough time to perform all the dialogues were (1) that students were not organized and efficient in their discussions, and (2) it took a while for the instructor to type all of the students' dialogues into the computer. These factors influenced the instructor's time management so that the students did not get to practice English conversation as much as they might have.

Recommendations for future instruction include:

- Display students' team dialogues via an Elmo machine (which can project handwritten texts) right after they submit them to the instructor;
- Have students revise and practice their team dialogues at home, and deliver them the following week in the classroom; and
- Have students discuss their team dialogue in groups using a concise and concrete procedure.

In brief, this activity could have served better in terms of English conversation ability had there been more practice time for

[3]According to the instructor, critical thinking can be best understood as a learning process in which students are given many opportunities to foster an ability (1) to respond thoughtfully to different types of input offered in the classroom, and (2) to create works of their own based on their prior knowledge and experiences. As for critical writing, it means ways of writing that allow students to use their own judgments and experiences. These definitions of critical thinking and writing were explained to the nine students before they were interviewed.

the students and had they experienced more extended original creative actions, thus reinforcing the initial premises.

Critical practices

Examined from the viewpoint of critical literacy, it is obvious that this activity might not have been "critical" enough, because students did not actually critically analyze and transform the text (i.e., the mime performance per se), one of the main goals embodied in the concept of critical literacy (McLaughlin & DeVoogd, 2004). Because students had only about five minutes to discuss, argue, exchange ideas, and write down their interpretations after each of the eight mime actions, it was difficult for them to "reflect critically on what was being learned [each of the mime actions] and taught in classrooms and to take an active role in the production of knowledge and meaning" (Green, B., 1988, p. 163). Also, such a performance-based learning activity is not equally or fully developed in all aspects, as is typical in traditional classroom reading and writing activities. To be more specific, this activity was designed for an English Conversation class, so criteria that are usually applied to text-based critical literacy activities need to be adapted. We should, as Damico and Riddle (2004) suggest, "identify *critical moments* in which participants hold different interpretations or understandings of a common event" (p. 45).

The importance of *critical moments* in the mime-based dialogue activity can be corroborated by the following viewpoints expressed by the instructor:

- *This activity was designed to give students a chance to see how subjective people might be when they communicate with others without verbal language, and to realize that human beings vary in interpretations. I would like to see my students not only respect different perspectives, but also question and even interrogate their own interpretations.* (Interview with the instructor)
- *On the basis of their mime-based role-play, LB created one dialogue; WC his own dialogue; each of the six teams completed a team dialogue. After all of the actions were performed, eight creative dialogues were generated, each displaying different issues.* (Instructor's journal entry)

Because students were asked to discuss in groups and to make sense of each mime action as a group, their dialogues were generated from different perspectives and through discussion, collaboration, and even negotiation. It can be found from the dialogues discussed above that these learners created their own works that touched on such issues as sexual harassment and peer relationships and that emerged from their everyday real-life experiences.

Dialogue 3

Take Dialogue 3 as another example. According to the students who created this dialogue, their choice of the issue of school bullying was based on what they had experienced at school. In this dialogue, WC does not respond to LP's greeting, immediately runs away, and then refuses to have physical contact, telling LP he does not have any money and asking him to leave. LP is portrayed in this dialogue as a student who tends to borrow money from his classmates.

However, Dialogue 3 ends with a solution that resorts to violence—kung fu. As WC explained, such a scenario is commonly seen at school. Issues that emerge from students' own experiences can be the focus of discussions designed to raise critical consciousness of their life, society, and culture. As the instructor reflected on his instruction he commented that, "In my future teaching, I will allow my students to have more time following the performance of their dialogues and to experience more critical discussion of the social issues presented in the dialogues."

(Interview, July 3, 2005).

Conclusion

In response to the first research question, "How did the students respond to the mime-based dialogue activity in the context of a class on English Conversation?" as reported earlier, students laughed and giggled while LP and WC were performing. During their discussions, students were eager to share their perceptions of the mime performance, and they tried their best to write the dia-

logue down in words. At the end of the class, students practiced their own dialogues in front of the class.

For the most part, students were delighted during the activity, as indicated from their comments in their reflection papers and on the class weblog. In their opinion, it was thrilling and hilarious to see their classmates (especially LP) try to communicate something using only facial expressions and gestures, and it was also interesting to think what could have been in these two performers' minds, and to put their ideas into a dialogue. As one student said in his reflection paper, "It is a lot of fun to learn English! The pleasure from interaction and the witty interpretations from sentence-making and thinking—Gee! This was exciting."

As for the second research question, "How did the students relate the mime-based dialogue to critical literacy based on their classroom practices?" findings revealed that students played different learning roles—code breakers, text participants, text users, and text critics. It was meaningful for students to relate the mime performance to their dialogues through thinking and writing.

First, students observed, thought about what they saw, and then extrapolated in order to make sense of each action performed by LP or WC. By doing so, they brought their own social or linguistic sources to the construction of their dialogues. Then students were offered a chance to promote their English-speaking abilities through various classroom activities.

Ultimately, students shared and read their dialogues, in which their voices were heard and understood as reflecting real experiences of the students themselves. Above all, the mime-based dialogue activity became a social event and practice in a particular kind of learning community, where students moved through, responded to, and made sense of their world.

Analyzed from a sociocultural perspective on classrooms and learning, the mime-based dialogue activity provided a case study of critical literacy based on the belief that language learning in the classroom should be seen as a social practice.

The time-management problems discussed in the paper indicate that the instructor could have extended the mime-based dialogue activity into a two-week activity. In the first week, the instructor could have focused on the mime performance, group discussions, and the completion of dialogues. In the second week, students could have performed their dialogues during the first hour and, in the second, shared their real-life experiences or discussed why and how they created their dialogues. Better time management of the activity should help students connect the activity to critical thinking and writing. Thus, students would have more opportunities to evaluate the cultural forces and influences involved.

Clearly there is some social risk with such activities, however. When implementing mime-based dialogues, care needs to be taken to ensure that students are not left open to ridicule by their classmates, and that sensitivity is modeled and expected when delicate topics or situations arise.

Ultimately, the research shows that language is not only a means of expression or communication, but also a socio-cognitive tool through which learners are socialized into their worlds. The students discussed in the research were not only shaped by the classroom designed by the instructor, but were also able to play a significant role in shaping a learning community through their team dialogues. Clearly, mime-based dialogues have a rich capacity to productively engage learners. Consequently, this activity warrants consideration in terms of its possible applications in, and potential contributions to, various instructional or learning contexts.

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Susan Szabo

The K-W-L Strategy: Helping Struggling Readers Build Evidence of Their Learning

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Susan Szabo *is an Assistant Professor of Education at Texas A & M University—Commerce, in Commerce, Texas, USA.*

When I was an Intermediate Reading Specialist, I worked with eighth-grade struggling readers on a daily basis. The school building was the eighth-grade center for the School District. All 66 eighth-grade students (38 female; 28 male) placed in my reading classes for one of their elective courses were struggling readers. All had been evaluated as being at least three years behind grade level, according to a reading placement test given to them by the district at the end of their seventh grade year. In the group that I report on here, 54 (82%) were Caucasian, 6 (9%) were African American, 5 (8%) were Native American, and 1 (1%) was Asian American. As I was working in a designated reading classroom, I had flexibility in how I taught reading. Most of my students displayed negative attitudes toward reading and were unenthusiastic about having to devote one of their elective courses to a reading class. These students had become very good at using coping skills to just get by and to keep them out of the limelight. Unfortunately, their coping skills also caused them to believe that they were "dumb." Thus, they easily gave up or did not try at all. This pattern of behavior has been documented by research (Ganske, Monroe, & Strickland, 2003; Harmon & Keehn, 2004; Headley & Dunston, 2000; Ruddell, 1999). Thus, I needed to find a way to help motivate my students, improve their self-esteem, and improve their literacy skills. I was tired of hearing my students say they were dumb, or that they could not do something, or that they would just do it wrong anyway.

The purpose

Reflecting on how to help these eighth-grade students, I revisited strategies that not only promoted content learning, but also could be used to help build students' self-esteem. I decided to use the proven K-W-L (Ogle, 1986) comprehension strategy in a different manner, as a way to provide concrete evidence to my students that they could become strategic readers. This article describes the results of my action research using the K-W-L as a vehicle to demonstrate to these struggling readers that their understanding of the topics being studied was broadened through their day-to-day interactions with text. My goal was to counter their feelings of being "dumb" and to help them build a visual record of their learning.

K-W-L background and variations

The K-W-L (Ogle, 1986) content comprehension strategy has a before–during–after structure. The *K* column *(What do we know?)*, which is filled in before reading of the text begins, supports comprehension by encouraging students to brainstorm in order to activate any prior knowledge on the topic being studied. This brainstorming, in turn, may help to motivate students to learn by creating an interest or curiosity in the topic. The *W* column *(What do we wonder?)*, which should be filled in before and during the reading of the text, helps the students set a purpose for reading by creating their own questions. The *L* column *(What have we learned?)*, which is completed after the reading process, allows the students to summarize their learning by writing down the main ideas and important facts learned.

Since the appearance of the K-W-L strategy, several variations have emerged. Carr and Ogle (1987) developed the K-W-L Plus, which incorporated semantic mapping and summarizing procedures. Reid, Forrestal, and Cook (1989) developed the K-W-H-L-S, which helped students answer the questions, "How will I learn it and work with others?" and "How will I share the information I have learned?" Bryan (1998) developed the K-W-W-L so that students could answer the question, "Where can

I learn this?" Moore, Alvermann, and Hinchman (2000) developed the K-W-L-S, which was designed so that students could answer the question, "What do I still need to know?" It emphasizes the need for further investigation to improve metacognition about a subject area. Allen (2004) developed the B-K-W-L-Q. The *B* encourages the teacher to build the background knowledge of students by reading aloud several short selections of additional informational material on the topic being studied before students begin to read the required text. This activity ensures that each student will have some understanding of the topic, which can then be summarized in the *K* column. The *Q* encourages students to develop questions after the activity is finished, which helps the students realize that learning is an ongoing process. Finally, Szabo (2006) developed the K-W-H-H-L. The first *H* column encourages students to write down and learn the hard words they do not know. The second *H* column encourages students to relate "heart" words such as *sad, happy,* or *scared* by linking what they are reading to what they have experienced.

The process—creating a visual record of learning growth

The process I used with my students began during the first week of the second semester and continued for six weeks. These procedures were implemented in 55-minute reading classes with 10 –12 students. During these sessions, we studied three different topics (a new topic every two weeks). The basic procedure was as follows.

Week 1, Day 1—Monday

Step 1. On Monday, I handed out a K-W-L worksheet to each student. On the flip chart easel, I had paper with the K-W-L chart drawn on it, so that I could model for the students how to do each step. I used flip chart paper, rather than the board or transparencies because I needed a way to keep our work for further viewing. I explained that each column represented something that a good reader does, but that right now, we would be focusing only on the *K* column to determine what they already knew about the subject being discussed. I further explained that this step required them to brainstorm or to think about what was already filed away in their memories about the topic. I reassured them that it did not matter how much or how little they wrote, but I encouraged them to think and to write for three minutes. As you can imagine, this task met with varying success. Moans and groans were heard throughout the room. Most students were staring into space for part, if not all, of the three minutes, as all of these struggling readers hated to write. I modeled the procedure by thinking and then writing on the chart paper for three minutes, using a black marker.

Step 2. Next, we shared our brainstorming comments. During this phase, I asked the students to put down their pencils, and I explained that I wanted them just to listen for what others knew about the topic that they did not. I did this for two reasons. First, I wanted them to focus on listening to the differing ideas expressed in order to help build their background knowledge. Second, I did not want them to write anything in the *K* column that they had not already written in the given three minutes.

As each student reported one of the comments he or she had written in their *K* column, I wrote a statement on my chart paper summarizing in my own words what they shared (using a red colored marker), followed by the name of the student who had provided the information. After the students had shared all their comments (the first time there were only five), I shared my written comments.

The students appeared to be surprised at the differing information each had on the same topic. Therefore, we stopped and discussed whose knowledge was more important. I wish I could say that they knew the answer the first time (they all chose mine as they felt that was the safe answer). It took several sessions for them to figure out that they all could have the right, or partially right, information; it was different, but still part of the whole.

Next, I had each student count the number of comments they had written in the *K* column, then write the number above the

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K column and circle it. I told them we would use this number later. I modeled this by counting only my comments (written in black) on the chart paper. Then we moved on to the *W* column.

Step 3. Before students filled out the *W* column individually, we practiced doing this as a class. I explained to them that good readers both answered and asked questions while they read. Therefore, we needed to develop a few questions of our own, as a group.

First, we talked about how we could get ideas for questions. We decided that the two best ways to develop questions were (1) to look at the class's *K* column on the chart or (2) to scan the reading of the day. The first time we did this, the reading was from their textbook. They began to see that they could read the captions under the pictures, the margin comments, the bold print, and the section titles to help develop questions. As a question was formulated, I wrote it on my chart paper in the *W* column. This time I did not attach individual names to the questions, as I wanted the whole class to own the questions. I told them that they would copy the questions later, as I wanted them to spend their time thinking of good questions and not worrying about getting the questions down or spelling the words correctly. The rest of the first session was spent developing three or four good questions. (Unbeknownst to the students, I helped them form a question that could not be answered by reading this text.) Once we had a list of four questions, I had students copy them into the *W* column of their own K-W-L worksheet.


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Day 2—Tuesday

Step 4. The next day, I had the students get out their K-W-L worksheets and review the *K* information, if they had any, and the questions that the class had developed, which were written down in the *W* column. We talked about how such questions would help them better comprehend a text by setting a purpose for their reading. I told them that I would read the text (I heard a few "thank heavens" as their Social Studies text, according to the readability test I had given it, was written at an 11th grade level), but that I wanted them to listen and follow along in the text to see if they could find answers to the questions. We stopped at the end of each column, discussed, and summarized what had been read. We also determined whether we could answer any of our questions. As we found the answers, I had students write them down in their own words, but including the concept words used in the text, in the *L* column. This process continued until the end of the section about the topic being discussed. Predictably, we had all the questions answered but one. We discussed the various ways students had answered the questions, to make sure everyone fully understood the answers. It was determined that because we could not answer all the questions we needed to read more (more moans and groans). Nevertheless, the first K-W-L worksheet was complete, even though the *K* column was empty on over half of the students' charts. I was happy with the process that had occurred.

Day 3—Wednesday

Step 5. On the third day, we started reading again, but our text was from a different source. Students were given their first completed K-W-L sheet (from the previous day), a new K-W-L worksheet, and a photocopy of a text from an old encyclopedia.

Using the new K-W-L sheet, we started with Step 1 and repeated the process. Again, I gave them three minutes to write down brainstormed ideas on the given topic. I told them this could include anything they had written the previous day, any facts they remembered that others had shared, or anything they read from the displayed class chart (as long as they rewrote in their own words what I had written). During this time, I walked around and encouraged each student to think about the information that had been shared on the previous day or to read the chart and write a phrase. After three minutes of writing, I asked students to count how many different pieces of information they had written, to put the number by the *K* at

the top of the page and circle it, so it would be easy to find. Next, they were instructed to go back to their first K-W-L worksheet, find the number circled on it and compare them by asking, "Did your knowledge grow from your first K-W-L to your second K-W-L?" The first part of their visual record was complete. I was able to congratulate every single one of these struggling readers on learning something new, as they had all written one to three statements more in this day's *K* column than they had in their first one. Once again, I had them put down their pencils and share one of their written statements. This time, however, they had to tell me where they believed they had learned the information—from the text that was read yesterday, from something that they had already known, or from a peer during yesterday's conversation. This time, after I wrote each shared statement on the new class K-W-L chart, I wrote both the name of the student who gave us the statement (to give the student a sense of owning the information) and the source of their information. This process took a lot longer than on the first day, because everyone had written something and they were more than willing to share one thought they had written and the source of learning. However, I added this step because I felt it was important that these students realize that we learn information from a variety of sources.

Step 6. We then moved on to column *W* so that we could design questions. This time, using their handout taken from an encyclopedia, we first skimmed the printed text, reading the first sentence in each paragraph, and students were encouraged to think about anything that they were confused about from previous discussions. Once again, I helped them to develop questions and, again, I made sure that there was one question that I knew could not be answered from that day's reading. Once these questions were developed, students copied them into the *W* column of their second K-W-L.

Day 4—Thursday

Step 7. I read aloud the encyclopedia information on the topic. Again, we stopped every so often and talked about what I had read to see if we could answer any of our questions. The answers were then written in the *L* column of the chart.

Weeks 2–4

We continued this process, using Steps 1–4, on the same topic for two weeks. Our readings were done both orally and silently, depending on the difficulty of the text that

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was used. By the end of the two weeks, each student had five completed K-W-L worksheets on the same topic. Each time we started a new K-W-L, they counted the entries and compared their written information in the *K* column with their previous K-W-L worksheet. Each time, the number was larger. By comparing the information in the different *K* columns, students were beginning to see their learning growth. All through the process, I reinforced the idea that the increase in the numbers of facts written in the *K* column showed that they were not dumb or stupid, and that they could brainstorm, and ask and answer questions critically, thus demonstrating that they were strategic readers. The third and fourth weeks, we started again with Step 1, and a brand new topic. However, instead of working as a whole class, each student worked with a "study-buddy," and I walked around to make sure that everyone was coping successfully, both with the reading material and with the filling out of the K-W-L worksheet. Once the study-buddy pairs had filled out the *K* column (3–5 minutes), we then got back together for class discussion and sharing time. As each pair shared a fact that they already knew about the topic, I wrote the facts on a new K-W-L chart. They then again broke up into study-buddy pairs to create their own questions (5–10 minutes). We then met as a whole class and I wrote in the *W* column one question developed by each study-buddy pair. On Day 2, the study-buddies had 30 minutes to read the material they were given and to answer the questions the class had compiled. The remaining 25 minutes of the session were used to discuss how the different pairs had responded to the questions. By Friday of the fourth week, each student had five K-W-L worksheets, which they used to compare their own learning growth from worksheet to worksheet on this topic.

Weeks 5–6

Weeks five and six followed the same pattern, but the students worked individually before we met for class discussion. In addition, the readings were harder, so there were only three K-W-L worksheets to compare. However, by the second K-W-L, we had to extend our three-minute brainstorming to five minutes, because the students could not get everything they wanted written down in the three-minute time period. I took this as tangible evidence of the progress being made.

Results

All 66 eighth-grade students successfully recorded growth in their learning. I had each student take his or her score from the *K* column on the first K-W-L sheet and compare it to the number of informational statements they had written during each of the subsequent three-minute quick writes. All had made notable gains in their content knowledge; all had written more on their last *K* than they had on their first *K*. The lowest gain was 5 additional knowledge statements, while the highest was 13. Furthermore, the last two *K* columns contained more detail and better supporting information, as the students started to elaborate while they were writing their brainstorming comments on their prior knowledge (see Appendix for an example of one student's growth).

Discussion

This was a powerful and motivating experience for my students. It was the first time that all of these students had so concretely measured their learning growth. Using multiple passes with the K-W-L and keeping copies of the individual worksheets provided a visual record of their learning. Counting their simple sentences or phrases on their first K-W-L worksheet and comparing the number to their more elaborated sentences on their fourth and fifth K-W-L worksheet, they could no longer say that they were dumb, or incapable of understanding, because they saw concrete evidence that they had indeed learned something about the content material being read and discussed. This format allowed these students to gain a deeper understanding of the topic, as we used a variety of text readings. Their broadened knowledge allowed them to write more elaborate sentences to display what they had learned. Although this activity was done with eighth-grade struggling readers, I believe that this strategy can be used for third graders and up. Everyone, no matter what age they are or what grade they are in, needs to be motivated at some time. Using the K-W-L multiple times to actually see one's learning growth not only builds self-esteem but also puts energy back into the learning process.

Implications for the classroom

Teachers and students alike are stressed with high-stakes testing. Teachers feel rushed to teach content and students feel frustrated when they do not catch on the first time. By the time struggling students get to the eighth grade, many are frustrated and have lost interest in the learning process. They know they are having a hard time and they feel "dumb." Teachers need to take the time at the beginning of the year—and throughout the year—to show them that they are not. Not only will this process help to build their self-esteem and bring about a positive attitude, it will help them to *see* that they can learn the content material, and they may even discover that some of the content is very interesting and pertinent to their lives.

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Appendix: Boy #1 – *K* column writing and growth chart for the Underground Railroad topic

Week 1 — Day 1 Comments: 2	**Week 1 — Day 3 Comments: 5**	**Week 1 — Day 5 Comments: 7**	**Week 2 — Day 4 Comments: 12**	**Week 2 — Day 5 Comments : 14**
1. helped slaves run away 2. slaves went north.	1. It helped slaves run away from their masters. 2. It helped slaves go north. 3. Slaves would move at night following the stars. 4. It was not a real railroad. 5. It was a network of people working secretly to help slaves escape to freedom.	1. It helped slaves run away from their masters. 2. It helped the slaves go north to freedom. 3. Slaves would move at night following the stars. 4. It was not a real railroad. 5. It was a network of people working secretly to help slaves escape to freedom. 6. Runaway slaves usually traveled secretly at night, and during the day were hidden in safe houses, barns, and haylofts. 7. The path or route was called "Freedom Trail." operated for many years before and during the Civil War.	1. It helped slaves run away from their owners. 2. It helped slaves go north where blacks were free. 3. Slaves would move at night following the stars. 4. It was not a real railroad, but it still moved people. 5. It was a network of people working secretly to help slaves escape to freedom. 6. Runaway slaves usually traveled secretly at night, and during the day were hidden in safe houses, barns, and haylofts. 7. The "Freedom Trail." operated for many years both before and during the Civil War. 8. Slaves walked many miles, usually at night, so they would not be caught. 9. They knew if they were returned to their owners they would be beaten. 10. Most slaves moved to big cities so they could not be found easily 11. The Fugitive Slave Bill of 1850 made it more dangerous for runaways and for whites who helped them. 12. White people living in the north who did not think slavery was right, helped them run away	1. It helped slaves run away from their owners. 2. It helped slaves go north where blacks were free. 3. Slaves would move at night following the stars. 4. It was not a real railroad. 5. It was a network of people working secretly to help slaves escape to freedom. 6. Runaway slaves usually traveled secretly at night, and during the day were hidden in safe houses, barns, and haylofts. 7. The "Freedom Trail." operated for many years both before and during the Civil War. 8. Slaves walked many miles, usually at night, so they would not be caught. 9. They knew if they were returned to their owners they would be beaten. 10. Most slaves moved to big cities so they could not be found easily 11. The Fugitive Slave Bill of 1850 made it more dangerous for runaways and for whites who helped them. 12. White people living in the north who did not think slavery was right, helped them run away. 13. The underground railroad lasted 40 years; 1810-1850. 14. A strong, lucky runaway might reach freedom in two months. However, bad weather slows down the journey and could last a year.

Strategic Teaching with Real-World Texts

In most classrooms a core textbook is the designated information source. Strategic teachers, however, recognize the value of making alternative text sources available to students. They know that when alternative sources are given legitimacy, youth can benefit from their unique perspectives. These sources, while largely untapped in traditional school settings, may hold the key to engaging students in meaningful reading and learning, and thereby elevating their achievement (Brozo & Simpson, 2007).

I urge teachers to use texts from the everyday worlds of their students as enhancements to core textbooks because youth will avoid reading if they find it difficult or boring (McPhail, Pierson, & Freeman, 2000). Guthrie and Wigfield (2000) observed that when students find reading interesting and connected to authentic purposes, their positive attitude toward reading increases, leading to a deeper love of reading as a primary source of information and enjoyment. Furthermore, students' reading comprehension has been shown to be greater with high-interest materials, because interesting material maintains their attention more effectively (Baker, Afflerbach, & Reinking, 1995; McDaniel, Waddill, & Finstad, 2000).

It almost seems too commonsensical to remind teachers of the value of using newspaper and magazine articles and other documents from the everyday lives of youth and adults as teaching resources. And yet, findings from Larimer and Schleicher (1999), as well as my own informal observations of hundreds of classrooms, reveal that these alternative, commonsense texts are not being utilized nearly as often or as effectively as they could be.

Teachers who incorporate everyday, real-world texts into their instructional practices find students are more engaged and thoughtful learners because the content is more relevant to their lives and experiences (Jarman & McClune, 2001; 2003; McClune & Jarman, 2000). For example, teachers can increase involvement in science learning by structuring activities that allow students to read and consult popular science magazines, such as *Science, Nature, Science and Industry*, and *Popular Science*, during class time. Teachers of government can focus students' attention on the government's role in establishing rules and regulations for the protection of citizens' health by reading and analyzing brochures about drugs and sexually-transmitted diseases published by public health agencies and the World Health Organization. Economics teachers can elevate student interest by introducing credit card forms, bank statements, and other personal finance documents into class as accompaniments to textbook coverage of these topics.

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Virtually every issue that emerges from the study of science, math, history, and literature can be enriched and made more relevant with newspaper and magazine articles and a great variety of other real-world documents (Hammer, 2000). Furthermore, to help youth see the importance and utility of learning textbook content, teachers can bring into the classroom familiar print materials from outside school that link directly to school-based topics. And, of course, in schools where the technology is available, teachers and students can access these kinds of documents electronically. Every imaginable kind of publication and form, from loan applications to drug and health brochures, is readily available online, and countless newspapers and magazines can be read online as well.

Many teachers routinely integrate real-life reading materials into their instruction to help students see connections between content inside the classroom and real-world issues and events

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outside the classroom. Here are ten examples:

- A health teacher has students bring in menus from restaurants and cookbooks from home when the class is working on food preparation and nutrition.
- For his unit on career explorations, a business education teacher brings in several examples of employment applications. He also urges students who may be applying for part-time jobs to bring in their applications.
- A chemistry teacher asks students to bring in labels from household cleaning products and foods that list their chemical contents.
- A government teacher uses popular news magazines to relate topics from the textbook to current events.
- An accounting teacher asks students to bring in actual bills and bank account statements to teach accounting terms and budgeting.
- A math teacher asks students to create math problems based on tables, maps, and graphs from the local newspaper.
- An electrical engineering teacher has students analyze actual diagrams and plans of electrical wiring schematics for residential and commercial properties.
- A physical education teacher makes available to her students numerous newspaper and magazine articles about performance-enhancing drugs and steroids.
- A language teacher asks students to bring in lyrics from their favorite songs to analyze for figurative and symbolic expressions and idioms.
- A writing teacher brings in advertisements from magazines targeted to youth, to explore persuasive techniques and language.

The list could go on and on, because the possibilities for integrating everyday reading materials into the content classroom are virtually limitless.

The inclusion of everyday, real-world texts along with the class textbook is feasible and can lead to more sophisticated processing of information and greater enthusiasm for learning. To use real-world texts alongside textbooks effectively, teachers need to make long-range plans, carefully considering how each topic will be developed, and how strategic teaching activities can be employed with real-world documents to engage learners and expand upon textbook concepts and information.

William G. Brozo is Professor of Literacy in the Graduate School of Education at George Mason University, Fairfax, Virginia, USA.

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Serghei Lisenco

The Need for Community When Implementing Change

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***Serghei Lisenco**, Pro Didactica Education Center, Chisinau, Moldova.*

Where do changes in the education system originate? Which changes become genuine reforms? Why do some changes, brilliantly conceived and initially effective, result in totally contrary effects when applied en masse? What can—and should—an ordinary teacher do in this situation?

For me, and I think for the majority of my colleagues in the former socialist camp, these questions have arisen again and again over the last 15 years because of the momentous changes experienced by our countries.

These notes are my attempt to share some thoughts about change and to reflect on the role of strategies designed to develop critical thinking in the evolution of education reform, or—to be more exact—in the formation of professional community.

All genuine innovations in any sphere, including education, are characterized by three closely connected elements: *new information, new behaviors*, and *new beliefs*. As we seek to foster the continuing development of our students, most of us would agree that we need to set educational goals for each of these three areas, planning what new information students should learn, what new skills they should acquire, and what beliefs should serve as the foundation for their actions.

According to Carol Rolheiser (1997), one of the authors of the Managing the Process of Change Workshop in Budapest, educational innovations must encompass three spheres simultaneously: organizational structure, time allocation, and organizational culture.

The question is, in which sphere will changes have a decisive effect on the whole system? In which of them is an ordinary teacher empowered to make a substantial impact? In which areas do a teacher's actions inevitably lead to changes in adjacent areas?

Michael Fullan (1996) claims that the most complex changes, and also the most crucial for ultimate success, are changes in the organizational culture. Taking Fullan's conclusions as the first premise in our rationale, we introduce a second premise: Strategies for developing critical thinking cannot be applied successfully unless we follow the basic operating principles stated below:

- Cooperation
- Mutual responsibility
- Openness to exploring other perspectives
- Active communication
- Reflection

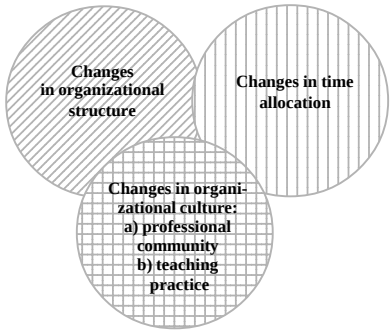
(Steele, Temple, & Meredith, 1997–1998)

We'll accept these premises as a starting point for our reflection, and explore how strategies for developing critical thinking skills might influence changes in the area of organizational culture.

Let's start with our everyday teaching practice, and with the teacher as one of the key figures in this practice. While it is impossible to address all aspects of our work in a short article, I would emphasize that if teachers start seriously implementing critical thinking strategies (RWCT strategies), they inevitably wind up reconsidering their views and practices in all three aspects of educational change mentioned above: They will encounter new information (e.g., regarding cognitive processes); develop new behaviors; and implement new beliefs. They will develop greater flexibility in their approach to teaching and build new relationships with their students. And the expected changes do occur—even teachers who have little practical experience with the RWCT strategies notice the changes. Following a professional development course in November 2006–January 2007, Moldovan teachers were asked: In your opinion, how are RWCT concepts and strategies significantly different from other approaches in education? Here are some of their responses:

- The most important thing for me is the focus on developing skills, instead of transferring

Three Spheres of School Improvement



information. This creates an atmosphere of trust in the learning environment, in which everyone has the right to have, and to express, his or her own point of view. Thus, students are inspired to learn. Both the atmosphere and the concrete methods and strategies encourage friendly and supportive relationships.

- Students are given more freedom, and they are made to think more. They have to express their own opinions confidently and listen to the different opinions of others, either agreeing or disagreeing with them.
- These methods reveal students' abilities, develop their personal qualities, and encourage them to engage in independent research.
- Students show genuine interest in learning, so lessons become more effective.
- Everyone can express his or her opinion, everyone has a right to make mistakes, everyone learns to respect other people's opinions, everyone becomes aware of his or her own uniqueness, and everyone wants to learn even more.
- Yes, this approach is truly different, because a lot of other approaches have now become outdated, while our life demands

I think it is no secret that we educators find ourselves in a state of constant conflict caused by two forces pulling us in opposite directions. On the one hand, we are trying to implement all the best methods that we (and our professional colleagues) have collected. As a result, we confidently (sometimes automatically) apply our accumulated knowledge and experience, we feel comfortable and stable, and others may even come to regard us as conservative (sometimes with respect, other times with condemnation).

On the other hand, in our constantly changing world we are presented with new generations of students—of all ages—who pose new educational challenges, introduce new perspectives, and establish new priorities. Under these circumstances our prior experience often proves inadequate for solving the problems life hands to us. And there are a lot of them: Students are no longer motivated by incentives that worked perfectly well just a few years ago; parents, too, are looking for something new from the teacher; the irrepressible authors keep turning out new textbooks; the ministry undertakes a flurry of experiments that change programs and curricula; our colleagues at school start behaving differently; and our students, comparing us with other "modern" teachers, keep lowering our grades.

What do we do in this situation? There are two contradictory ways out. The first is to cling to canons and established programs, to fight back against disengaged students, "irresponsible" parents, authors of "trendy" textbooks, school administrators and colleagues whose ideas undermine our comfortable life. The second way is to try to accommodate ourselves to the demands of those disengaged students, "irresponsible" parents, restless and ambitious colleagues, administrators, and authors of textbooks and programs. However, this path may bring us into conflict with ourselves. Both ways will exact significant emotional costs, challenge our spiritual strength, and complicate our relationships with all those around us.

I believe that the road we actually choose lies somewhere between these two extremes. This road becomes more evident when I recollect my experience as a canoeist. The challenges faced by today's teacher might be compared with a white-water journey along a rushing mountain river, where the canoeist encounters new obstacles and unexpected turns every minute. You can try to make your boat heavier and more stable, but this will also make it less maneuverable, and if it does not flip over in the rough water, it will eventually run aground on the rocks. You may redouble your efforts (your own or the whole crew's) to fight the waves and the current, but sooner or later either the river will beat you or your crew will mutiny.

However, there is another alternative. You learn to "read the water," to understand where its forces are directed, and to use those forces to carry your boat around the dangerous rocks. This approach is based on the belief that the river is an ally, not an enemy, and that our efforts should be directed not at a doomed struggle against the river, but at obtaining new knowledge and new skills. The result will be new behaviors that help us to succeed, rather than leading us to failure and new problems.

I would like the reader to draw the following conclusion from this metaphor: Teachers need to constantly develop their knowledge, skills, and beliefs, their ability to "read the water"—and by doing so, they will influence the changes in the world around them.

When we start applying new strategies for developing critical thinking, we acquire new knowledge (not only about how these strategies work, but also about ourselves), new skills, and new beliefs, and we form new relationships. All this, in turn, becomes part of the overall process of innovation in education.

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Workshop in child advocacy for parents in Pro Didactica Education Center

something new. Innovation is needed not only in the economy, but also in the system of education.

- The RWCT approach implies using a variety of techniques, and therefore a teacher can choose what is most effective for any individual lesson. Besides, the RWCT concept departs from the traditional *teacher vs. student* approach, thereby providing for greater freedom of action and helping students become more conscious of their individual worth.
- These methods lead to a better quality of education. They allow us to make teaching and learning much more effective and fascinating.
- These approaches provide greater opportunities for both the teacher and the student. The teacher is always engaged in reflection, is always willing to give more, while students motivate their teacher to engage in self-education.
- Preference is given to putting aside authoritarian methods of teaching, to methods using problem-solving and research, and to consideration of the characteristics and interests of the individual child.

To summarize these comments, we can say that these changes [in methods] also result in changes to the individual

Table 1 **Correlations Between the Dimensions of Professional Community and the RWCT Approach**

Professional community building (Kruse, Louis, and Bryk, 1994)	Basic principles of the RWCT approach	Comments
Critical elements • Reflective dialogue • De-privatization of practice • Collective focus on student learning • Collaboration • Shared norms and values	• Collaboration • Mutual responsibility • Openness to exploring other perspectives • Active communication • Reflection	*Using RWCT strategies on a regular basis, teachers improve their own skills in collaborative work, and become accustomed to sharing their feelings, experiences, and ideas. These skills create the necessary conditions for forming a professional community.*
Structural conditions • Time to meet and talk • Physical proximity • Interdependent teaching roles • Communication structures • Teacher empowerment and school autonomy	• Collaboration • Mutual responsibility • Openness to exploring other perspectives • Active communication • Reflection	*These structural conditions are already in place in classrooms where RWCT methods are practiced. The way students and the teacher organize the instructional process and the educational space minimizes communication barriers. They establish methods and habits of communication and can exchange roles, switching from the role of an expert to that of a student. When these structural conditions move outside the classroom and are accepted in the "corridors of power," teachers are in a position to form a professional community.*
Social and human resources • Openness to improvement • Trust and respect • Cognitive and skill base • Supportive leadership • Socialization	• Collaboration • Mutual responsibility • Openness to exploring other perspectives • Active communication • Reflection	*Critical thinking strategies shape the individual, providing him or her with the qualities necessary for active and fruitful participation in a professional community.*

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teacher—one of the most important elements in the complicated system of education. However, change in a teacher alone is not sufficient to transform the system as a whole. When a teacher becomes an active, dynamic element of the system, he or she almost inevitably comes into conflict with other elements of the education system: students, parents, colleagues, administrators, textbook authors, and curriculum developers. In some cases this conflict may be intense, and in order to hold their ground and survive, innovative teachers need support from their colleagues. This point brings us to the second element that determines the path of change in the culture of an organization—the professional community.

Kruse, Louis and Bryk (1994) in "Building Professional Community in Schools" consider three dimensions of professional community:

- *Key elements*
- *Structural conditions*
- *Social and human resources*

For me, and I hope for all experienced practitioners of RWCT methods, the conclusion is fairly evident. You may begin using these methods out of mere curiosity, professional interest, or ambition. But the longer you apply them, and the more deeply you analyze your experience with them, the more acutely you feel the need for change in your working environment.

One result of such change should be the formation of professional community.

Unfortunately, reality sometimes surprises us with its cruelty, and our school colleagues frequently constitute a force that places limits on our personal transformation. Thus, the above-mentioned teachers from Moldova remarked bitterly on the indifference and even negative reactions from some of their colleagues to their reports about their experiences using RWCT strategies and the resulting changes in their classrooms. Fortunately, we have options for professional community other than a formal group based in a particular school. There are professional organizations working on the local, national, and international levels. Examples include the International Reading Association (www.reading.org), the International Step by Step Association (http://www.issa.nl/index.html), and the RWCT International Consortium (http://ct-net.net/). In these times of rapidly developing information technologies, which make it possible to disregard the physical distance between us, such organizations can facilitate reflective dialogue, allow us to share our experiences, and promote democratic ideas and values.

Now, let us sum it all up. By adopting the RWCT approach and strategies, we inevitably become members of a professional community—either within our own school or in a larger professional group. Then, together with other members of this community, we continue to search for answers to all the new questions that arise as the innovation process unfolds:

- Should everyone be expected to strive for change?
- What should be the balance between tradition and innovation?
- What is the appropriate pace for introducing change?
- Are the advantages of our new approaches obvious to teachers, students, and administrators?

Of course, there are no simple answers. However, as we seek to answer these questions, we begin to better understand the mechanics of change and learn how to manage changes.

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Yury Vasiliev

School Management: A Critical Reconceptualization

Photo from the author's archive

Yury Vasiliev *is the Principal of School-Lyceum #2, Kyzyl-Kiya, Kyrgyzstan.*

In recent years we have been hearing that education should have a humanistic character and that its purpose, content, and organization should foster the unrestricted development of both students and teachers. We want our educational institutions to be more independent, with the freedom to choose the direction of their overall activity, curriculum, and textbooks. It is obvious that these tasks cannot be fulfilled without efficient school management. But what kind of management should it be? What roles do school administrators and teachers presently play in the management of educational processes? I shall try to answer these questions on the basis of the experience of our school—Lyceum #2 in the town of Kyzyl-Kiya, Kyrgyzstan—where for the past several years school management has been based on the philosophical ideas of *Reading and Writing for Critical Thinking* (RWCT), an international educational program that has become quite popular in Kyrgyzstan. In this article, the term *management* will be used to designate the entire spectrum of activities involved in organizing the operation of the school, achieving agreed upon goals, resolving problems, and regulating internal school processes.

School management as practiced during the Soviet period had a number of very specific features. A top-down system governed all spheres of life, including schooling. Directives about how to conduct teachers' meetings and seminars were issued by external authorities, lesson design was carried out in accordance with strict rules, and the approach to reading instruction was the prerogative of an assistant principal. Such approaches no longer correspond to modern realities. Today no one doubts that it is time to replace the out-dated system with a new, more effective one. But what should this new system look like?

School management includes many components. However, in this article I will touch upon only those we have worked out logically and systematically in our school: the role of the school administration; the role of the teaching staff; and strategic planning.

In Kyrgyzstan, it so happened that the period of increasing contradictions between current realities and the existing system of school management coincided with the active promotion of the RWCT program. At the basis of this program are three fundamental philosophical principles: the importance of *reflective practice*, the need to critically *reconsider habitual routines and assumptions*, and the fundamental role of *motivation* in learning (Valkova, et al., 2005).

It was these three principles that we, the school administrators, chose as the basis for reorganizing the management of our school. Why the administration rather than the teachers themselves? Simply because, as the first members of the staff to take a course in critical thinking, we were acutely aware of the necessity for change. Later we were joined by other teachers as well.

School administrators (the principal and assistant principals) play a leading role in the organization of the educational processes in any school. They direct the activities of a pedagogical collective. They set the tone for the system of in-school management. Accordingly, if they are to introduce innovations, administrators themselves must be ready for change. They must be willing to critically evaluate existing assumptions and established procedures, and be prepared to create conditions for their teachers to do the same. Thus, administrators need to be personally motivated, and also need to be able to motivate their colleagues to participate in the management process. They must also be able to share power with teachers in formulating and executing the overall plan. It is only when we provide such conditions that it becomes possible to forge a new system of school management that honors the principles of critical thinking.

We, like many other heads of modern schools, know from personal experience that the teachers who are highly motivated to learn, and capable of generating bold new ideas, are the ones likely to become active participants in the managerial process. Therefore, we try to create conditions that stimulate and support the exploration and adoption of new ideas.

How does management based on RWCT ideas actually work? I will attempt to demonstrate the process with the help of the model developed in our school for interaction between the teachers and the administration (see Fig. 1). We have successfully used this model for two years to organize teachers' meetings and conferences (Vasiliev, 2006, p. 38). The model was based on an idea from the guidebook *How to Develop Critical Thinking* (Valkova, et al., 2005).

Having repeatedly applied this approach, we are convinced of its effectiveness in resolving concrete managerial issues and in encouraging all teachers to be involved in making important school decisions. Teachers work together as a team, which corresponds to the spirit and philosophy of the RWCT

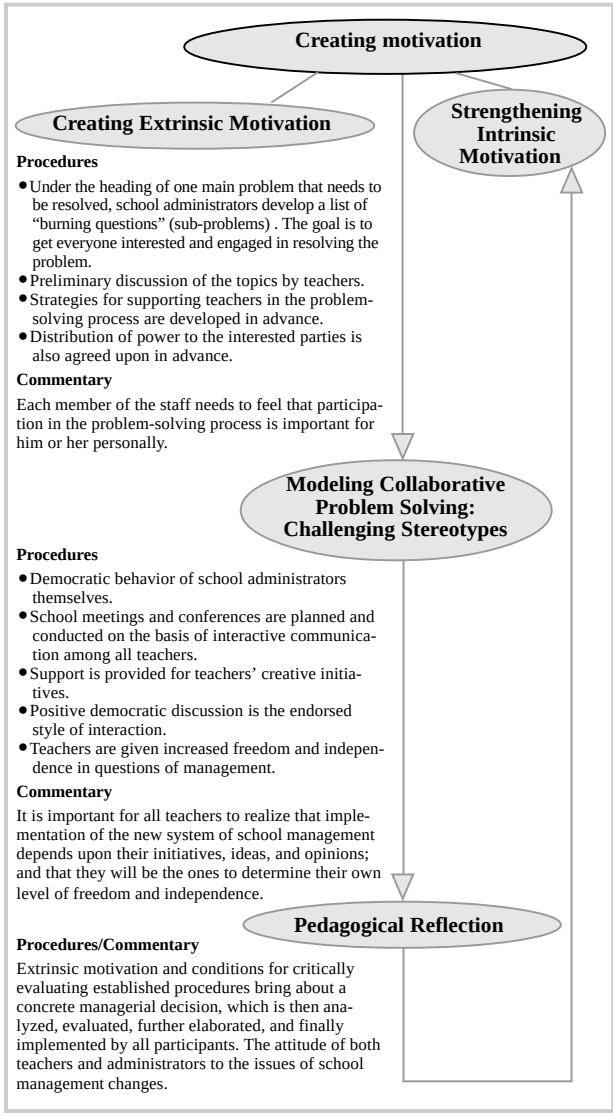

Fig. 1. Model of interaction between teachers and school administration

program. For example, when we faced serious discipline problems with some of our students (irresponsible attitudes to extracurricular activities, habitual lateness, and rude behavior), we planned and conducted a staff conference on the theme *Resolving Disciplinary Problems*. Table 1 provides a schematic description of the work undertaken during this conference.

The *Discipline Monitoring Chart*, which we displayed on a special stand, allowed the entire school to monitor and evaluate the work of each class (teacher and students). As a result, in just a month's time there were far fewer cases of late arrivals and misconduct, and students were taking extracurricular events more seriously.

Thus, the new model of interaction between administrators and teachers was first applied at our school to resolve a very practical and concrete administrative issue.

Any reconceptualization of school management demands that we define the roles and relationships of all participants in the process. Managing a modern school in keeping with the principles of critical thinking cannot be a matter of having the administration issue orders and their subordinates implement them. To my understanding, a school principal is first and foremost a teacher of teachers, who encourages everyone to learn. Management is effective when school administrators act as a unified team working to achieve common goals. In such a team everyone has some say in defining his/her role and responsibilities and is able to function cooperatively; everyone bears personal responsibility for his/her contribution to joint tasks; everyone is able to make decisions pertaining to the sphere of his/her own activities. A brief description of the work of departmental committees at our school is offered to illustrate how such relationships operate in practice.

In Soviet times, the evaluation of the quality of the learning environment and student acquisition of knowledge was the prerogative of the school administration. The principal and assistant principals attended and analyzed lessons to assess the quality of instruction. Our school was no exception. Now, however, most of this work is done by content area departmental committees empowered by our school's pedagogical council. These departmental committees at our school have fairly broad powers: They elect their own heads, distribute responsibilities among their members, and define

Table 1 **Design for a teachers' conference on resolving disciplinary problems**

Aspect	Activity and Results
Motivation	Some time before the conference we wrote out a list of the most serious problems on a sheet of chart paper, and requested that teachers think about and discuss possible solutions.
Modeling collaborative problem solving (challenging established procedures)	In discussions with teachers, administrators emphasized that a concerted effort by all the staff was required to change the situation, and that it was very important for everyone to contribute his or her viewpoint and possible solutions. In this way we tried to overturn the assumption that decisions are made by the administration alone.
Pedagogical reflection	The conference was organized in a teamwork format. The groups developed various possible solutions to the problem through discussion and reflection. The end result of our joint work was the *Discipline Monitoring Chart*, a unique tool that allowed us to trace the effectiveness of disciplinary measures in each class according to several criteria (out-of-class activities, maintaining discipline and appropriate conduct, arrival on time). It is evident that success depends on the contribution of each teacher and each student.

the content and character of their work. Among other things, departmental committees are responsible for assuring the quality of both student achievement and teaching. A departmental committee, as a team, analyzes lessons taught by the members in the context of *reflective practice*, designed to *challenge habits and assumptions* as to how this analysis should be conducted and facilitated. The positive and constructive feedback resulting from this process *motivates* teachers to work more effectively in the future.

Here is a concrete example. A young teacher who has presented an open lesson feels that the lesson did not go as planned, and, expecting her colleagues who attended to point out all the shortcomings, she anxiously awaits their verdict. However, her fears are not realized. According to current procedures in our school, immediately following a class observation all those who were present get together for collective *reflection*:

1. The head of the departmental committee ***facilitates*** the reflection.

2. The floor is first given to the author of the lesson. The teacher explains the goals and objectives she set for herself; the methods she used and her reasons for choosing them; the results she achieved; and what she thinks might be done to improve the lesson.

3. Members of the departmental committee ask questions in a particular order:

a) First, questions aimed at clarification of problematic points in the lesson;

b) Second, questions designed to help the author recognize what needs to be improved.

The importance of the second sort of questions can't be overestimated. In fact, in the past, after a teacher had explained her actions, the observers would have immediately started to give their recommendations—at best, that is, if they thought the lesson was a good one. And if not, they would enthusiastically point out more and more mistakes, emphasizing their gravity in every possible way. To be honest, I would not envy this poor teacher! Now, however, in the course of collective reflection, the teacher is encouraged to determine and articulate for herself (with strategic prompts from the others) what in her lesson requires improvement. It is at this stage that our assumptions about procedures for evaluating a lesson are overturned. The teacher is subconsciously expecting criticism; instead, her colleagues help her evaluate her own lesson objectively. In the course of this discussion she takes note of specific suggestions for improvement.

4. Recommendations from experienced colleagues. No one makes negative remarks! All recommendations are given in a constructive tone and spirit, as their point is not to instruct, but to assist the author in improving the lesson. The recommendations mainly concern those parts of the lesson that were not discussed previously. By this point in the process the young teacher has likely realized that her colleagues are not trying to judge her, but seek instead to help her improve her pedagogical skills.

5. Concluding words from the author of the lesson. In our experience, the young teacher always expresses gratitude for the help rendered. Having realized where she needs to apply additional effort, she now has the *motivation* for self-improvement.

We have noticed that after such discussions many of our young colleagues feel much more confident and the quality of their lessons improves. Sometimes, as a result of this reflective process, they immediately revise their lesson plans to incorporate the suggested changes and invite their colleagues to revisit the same lesson in a parallel class. It goes without saying that this lesson usually proves much more successful than the previous one!

What else do departmental committees do in our school? They

make decisions concerning effective teaching approaches for their subject areas; they explore ways to strengthen the skills of individual teachers; they seek ways to recognize the efforts and accomplishments of effective teachers. Each member is free to express his or her opinions, with the result that the decisions of the committee are supported by all. I believe all of these initiatives and activities bring us closer to a school environment that truly encourages all members to think critically and participate actively in the management of the school.

Management of any organization requires a definite ***strategic plan***. In a school it is usually an annual plan, which is based on the state educational programs and curriculum but takes into account the individual character of the particular school and the needs of its teachers, students, and their parents. Typically, the plan for a new academic year is developed by summarizing the results of the previous year and analyzing successes and failures. Formerly only administrators carried out such analyses—not only in our school but throughout the country. Naturally people came to believe that only administrators were in a position to develop strategic plans. In our attempt to restructure school management, we made a conscious effort to destroy this long-term assumption and involve the whole pedagogical collective in analyzing achieved results and planning for the future.

Photo from the author's archive

Pedagogical Reflection in School-Lyceum #2, Kyzyl-Kiya

In order to optimize the plan for the 2006–2007 educational year, to achieve both efficiency and quality, in June 2006 we held a seminar during which teachers could consider examples plans from previous years (plans compiled exclusively by administrators). The teachers divided into teams to study and analyze the materials, guided by previously prepared questions that focused teachers' attention on key aspects of planning:

- How can we fulfill all aspects of the plan?
- What do we do if it is not possible to execute certain aspects of the plan?
- What are the rights and obligations of the members of the pedagogical collective directly involved in the performance of the plan?
- How can we make sure everyone understands all aspects of the plan?
- How do we verify the quality of the actions taken?
- How can we ensure that the plan is not a burden, but rather provides essential guidance for our work?

Based on their analysis of previous plans, the teachers of our school outlined requirements for the new plan they were designing to promote efficient management (Table 2).

After agreeing on these criteria, we chose a special day at the end of the academic year when all school staff were involved in scheduling for the next year. Our work was organized in the following way:

- The basic aspects of school management were listed on a flip chart.
- Teachers were asked to join together and form *project groups* according to the aspects of the work that interested them most.
- Each group was given the task of designing the strategic plan for its own specified

Table 2 **Requirements for an efficient plan**

A plan is not a dogma, but a flexible structure, which can be revised in the course of its implementation in response to situational necessity or changes in conditions.
A plan is a self-adjusting structure, which even in a revised form (after corrective changes have been introduced) will contribute to realizing the goals and objectives of the school.
A plan should incorporate the mechanisms for its implementation and state the rights of those responsible for the execution of particular components.
A plan should provide motivation for those participating in its implementation.
The plan should be transparent and should eliminate, or at least minimize, stereotypical or routine approaches to implementing the planned actions.
The goals of the plan need to be measurable, and the results available for analysis and evaluation, i.e. for reflection.

Photo from the author's archive

In the library of School-Lyceum #2, Kyzyl-Kiya

component, according to the requirements outlined previously.

- After plans for each of the separate areas were developed, an expert committee, consisting of representatives of each group and school administrators, was given the responsibility of correlating the various plans and drawing up a comprehensive general plan.

As it has turned out, this process of designing the annual strategic plan has become a key part of our reflective practice (we are relying on its results in the current academic year) and, at the same time, a way to involve teachers in the management process.

There is another important element of school management in our school, one that concerns students rather than teachers, and that is the *student council* or *parliament*. Surely students, more than anyone else, deserve to have a say in school management. For example, children at our school now decide independently whether to include or reject specific extracurricular events and activities. And we, the teachers, take their opinions into account, realizing full well that imposing our will is ineffective; while on the other hand, supporting student initiatives provides a powerful stimulus to increase their creative activity. Our viewpoint is clear: We support conditions that help children learn to make independent decisions and offer consultations only when needed. Consequently, when we arrange the strategic planning day described above, a team of schoolchildren (members of our student council) works hand in hand with us. They develop their own proposals regarding the organization of academic work, and these proposals are always included in the overall plan.

The experience of our school confirms that actively challenging habits and assumptions creates conditions for *reflective practice* and leads to internal *motivation* for change. The role of critical thinking is crucial here, as we believe it to be an essential component of the professional work of every teacher. When traditional ideas about school management are being dismantled, critically minded teachers feel a need to reflect, to analyze what is happening, and to participate actively in this collaborative work. In the course of planning, such teachers are capable of making considered, well-thought-out decisions and of assuming a meaningful role in the managerial process. Critically minded teachers are capable of predicting the possible results of their planning. Consequently, we maintain that one of the conditions for reforming school management on the basis of RWCT principles is the presence of a critical mass of critically minded teachers.

Summing up the experiences of our school over the past few years, my colleagues and I came to the following conclusion:

Effective school management is possible when:

- The head of the school is a critically minded person who consciously analyzes his or her role in the school management;
- There is a team of critically minded administrators who work together in a spirit of cooperation;
- Members of the pedagogical collective and students are given decision-making powers;
- Collaborative managerial activities are planned in alignment with critical thinking principles.

And last but not least: A necessary condition for efficient collaborative management is a favorable school climate. Only when the environment is supportive can we create a team of like-minded thinkers, capable of guiding the school in the spirit of our time.

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