Mai Na Moua is an elderly Hmong woman who left her native Laos after the Vietnam War and now lives in Wisconsin. She recalls the first time she ever saw written language. As a child she accompanied her father on a trip from their village in the remote Laotian highlands to a nearby city, where she saw writing on the doors of shops, on street signs, and in the notebooks of the local merchants.

For Teng Vang, a Hmong veteran of the CIA-sponsored “Secret Army” of Laos, literacy came in the context of war and Christian faith. As a soldier, Vang was trained to keep records and write reports for his battalion commander. “We would put down, for example, ‘Today we went to fight the Communists. Did we win or lose? How many of us died?’” Later Vang would become an evangelical Christian and learn for the first time to read and write his native Hmong language, albeit in an alphabet developed by French and American missionaries.
Commerce, schooling, warfare, missionary Christianity. These are examples of competing forces that have helped shape Hmong literacy. Since coming to the United States, the Hmong have felt additional forces acting on their literacy development—employment, community activism, fighting prejudice, and preserving their unique history.

John Duffy, a researcher for WCER's Center on English Learning and Achievement (CELA), has studied the historical basis of Hmong literacy development (in the years before the Hmong left Laos) as well as the more recent history (since 1975) of a group that settled in northern Wisconsin. Duffy’s work for CELA explores the development and functions of literacy in the U.S., particularly as these have been experienced by an ethnic and linguistic minority culture. With funding from the Office of Educational Research and Improvement, U.S. Department of Education, through a subcontract with SUNY-Albany, Duffy interviewed 40 Hmong people of diverse backgrounds about their experiences of becoming literate in one or more languages. From the interviews a rich and complicated narrative of literacy development among the Hmong has emerged.

Literacy development in Laos

In Laos, Hmong people were typically introduced to literacy in the context of three powerful institutions—Laotian public schooling, the U.S.-backed Hmong military, and missionary Christianity. Each of these provided a language and set of literacy practices in which the Hmong were expected to define themselves. In the Laotian public schools, where the Lao government sought to instill a sense of patriotism and national unity in a country of diverse minority cultures, Hmong children studied the Laotian language, history, and traditions.

Military bureaucracy and Christian cosmology offered the Hmong other identities and ways of understanding themselves and the world. For example, NaLue Hang recalls that his first experiences of written language came when French priests came to his village and began teaching Bible studies along with mathematics, history, and other subjects. “[T]he priests came in and they taught us how to read and write, and . . . they gave us a Bible—a very simple one for you to take home to read, so I learned how to read a lot from those Bibles.”

For Hmong soldiers, the military offered the chance to use the literacy skills they had learned in Laotian public schools or through their Bible lessons. The bureaucracy of the war demanded record keeping and various forms of military correspondence. Hmong soldiers who were exposed to
these literacy practices became skilled letter writers—a talent that would be called upon and learned by others when the Hmong left Laos to migrate to the West and were separated from family and friends.

Gaining literacy in the U.S.

The Hmong people in the Wisconsin community Duffy studied have used literacy to remember their past, organize themselves, and resist racism directed at them in the community. In many homes, for example, people are using word processors to write their autobiographies, chronicling their often tumultuous experiences in Laos and the United States. Zer Chang, a Hmong teacher and mother, has said that she wants to keep a record of her history for her children and for others “who will grow up not knowing much about their family history, why we are here, our participation in [the war] and of our love for our country and our people.”

Other Hmong use reading and writing in the context of community organizations that provide information and assistance. A Hmong women’s group, for example, publishes its meeting agendas, minutes, and a monthly newsletter that reports on activities such as the scholarship fund it offers to young Hmong women wishing to go to college.

Finally, many Hmong are using writing as a way to tell the story of the Hmong to members of the majority culture, many of whom are indifferent or even hostile to the local Hmong community. When a letter to the local newspaper complained that Hmong people ate dogs, for example, a Hmong community leader wrote back to dispute this and other rumors about the Hmong. Such texts by Hmong writers illustrate not only how Hmong literacy practices are shaped by the majority discourse—as Hmong writers participate in the language, themes, and forms of argumentation of the English language majority—but also the ways in which writers appropriate the majority discourse and use it for their own purposes.

Duffy’s study sheds light on the literacy traditions and aspirations of an American minority culture, one that has been described in educational literature as “preliterate,” and whose children have often been taught under the assumption that their parents have no familiarity with written language. The study also explores ways in which learning to read and write takes place in the context of powerfully shaping discourses that influence social meanings and the construction of individual identities. The accounts of the Hmong writers suggest, however, that while such discourses do indeed exert extreme pressure on individuals and cultures, they can also be reimagined in ways that offer new forms of cultural and political expression.

*John Duffy directs the Writing Center at the University of Notre Dame. He wrote a slightly different version of this paper while a researcher for the Center on English Learning and Achievement at the UW–Madison.*

**CELA** addresses improvement in English instruction, kindergarten through grade 12. The Center aims to specify the features of curriculum and instruction that are essential to students’ success in English, including skills with oral and written language, literature, and forms of communication. The research team is examining the intersections between English and other academic subject areas, e.g., history, science, and mathematics—those contexts of cross-disciplinary approaches that have been the focus of many recent proposals for reform.
How do students’ writing skills develop in the classroom context? Is there a relationship between general classroom discourse and developing writing skills?

There certainly is, say researchers at WCER’s Center for English Learning and Achievement (CELA). But it depends on the kind of class.

UW–Madison English Professor Martin Nystrand, Sociology and Education Professor Adam Gamoran, and researcher William Carbonaro recently observed classroom discourse and writing in 54 ninth-grade English classes and 48 ninth-grade social studies classes. Their study, funded by the Office of Educational Research and Improvement, U.S. Department of Education, through a subcontract with SUNY-Albany, found that student writing is enhanced when reading, writing, and classroom talk all cohere. Unfortunately, though, the study found that better writing was exhibited at the end of the year by students who completed their written work and students in classes where fewer students were off task.

Nonetheless, the study found some differences in writing between English classes and social studies classes.

- Though frequent writing assignments enhanced writing in English, they had the opposite effect in social studies.
- Students chose writing topics twice as often in English as in social studies. Choice was a liability in English but an asset in social studies.

Nystrand and colleagues came to understand these differences when they looked closely at writing...

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Recent advances in teacher assessment hold considerable promise for improving the quality of teaching and learning in U.S. schools and for increasing the status and respect associated with the teaching profession in this country.

In research for WCER, UW–Madison Education Professors Andrew Porter and Allan Odden, along with student researcher Peter Youngs, reached this conclusion after surveying current and emerging methods of teacher assessment. Their goals were to:

- describe many of the new approaches to teacher assessment,
- examine whether they promote reflective, learner-centered teaching practices,
- consider their psychometric properties, and
- discuss their possible uses.

Over the past decade, several states, districts, and national organizations have developed or implemented new approaches to teacher assessment. Some of these approaches feature innovative assessment strategies such as teacher-developed portfolios, constructed response questions, and assessment center exercises, while others attempt to employ traditional methods, including standardized, multiple-choice tests, classroom observations, and structured interviews in ways that better measure complex teaching performance.

“The 1990s will surely go down in education reform history as a period of intense activity and focus on teacher assessment,” says Porter. The Interstate New Teacher Assessment and Support Consortium (INTASC) and the National Board for Professional Teaching Standards (NBPTS) were both founded in 1987, he points out. And work on the Educational Testing Service’s (ETS) PRAXIS series began in 1988.

In all three assessments, much attention was given initially to articulating standards for teaching. It has been against these standards that the development of the assessments has proceeded. At the same time, the National Council of Teachers of Mathematics (NCTM) Content Standards (1989) and the American Association for the Advancement of Science (AAAS) Science for All Americans (1989) first appeared. Both standards for teaching and standards for students triggered major efforts to revise and upgrade assessments.

But the uses of these new instruments are just beginning to catch on. There is still much variability of teacher assessment practices at the state and local levels, and there is a similar variability in reform of student achievement assessment. “Good assessment of ambitious and demanding standards is hard work and it’s expensive,” Odden says. “It’s not easily implemented on a wide scale, and the payoff of these efforts to reform assessment is not yet known.”

Teacher assessments can clarify the goals for preservice and inservice teacher education and, in the process, make them both more effective and efficient. Teacher assessments can become an integral part of a professional development program, providing feedback to teachers on their practice and pointing to directions for improvement.

There may be some tensions, however, between the formative uses and the accountability uses of teacher assessment. Also, the ways in which teacher assessment may serve these purposes can vary. Is the assessment a minimum competency instrument? Or does it assess a range of levels of expertise? If the former, then the assessment will have its strongest effect on the weakest teachers and the weakest teacher training efforts.

Teacher assessments depend on clear knowledge of what constitutes good teaching, Youngs says. “What are teachers who do well on the assessments supposed to be able to accomplish? Are they to have the knowledge and skills to be able to produce important gains in student achievement on accepted measures of student achievement? Are they to create a safe and orderly environment for students? Are they to produce students who become good citizens? Are they to con-

Let’s make wise use of new teacher assessments

There is much variation in teacher assessment practices at the state and local levels.
A study from WCER’s National Institute for Science Education (NISE) shows that small-group learning arrangements in undergraduate science, mathematics, engineering, and technology (SMET) courses and programs provide important educational benefits.

NISE researcher Leonard Springer and colleagues showed that students who learn in small groups generally demonstrate greater academic achievement, express more favorable attitudes toward learning, and persist through SMET courses or programs to a greater extent than students receiving more traditional modes of instruction. The reported effects are relatively large for research on educational innovation.

Springer says these effects point to a need for more widespread implementation of small-group learning in undergraduate SMET courses.

“Collaboration in SMET courses and programs enhances students’ preparation for collaboration in their professions,” says Mary Elizabeth Stanne, a co-author of the report. “It gives students a better sense of how scientists and engineers work.”

A literature search produced 383 reports related to small-group learning in postsecondary SMET from 1980 or later, 39 (10.2 percent) of which met the inclusion criteria for this meta-analysis. Students who learned in small groups demonstrated greater achievement, persisted through SMET courses or programs to a greater extent, and expressed more favorable attitudes than students who did not work cooperatively or collaboratively. The average effect size was one-half standard deviation, a difference large enough to move a student at the mean of a normal distribution to the 70th percentile. The magnitude of the effects found exceeds that found in comparable reviews of research on educational innovations.

But for the most part, college and university educators have yet to respond to calls for greater opportunities for collaboration and cooperation in SMET courses and programs. Most educators still tend to focus on teaching rather than on learning. Samuel Donovan, another co-author of the report, says that the unintended consequences of this focus include unfavorable attitudes toward SMET among students, unacceptably high attrition from SMET fields of study, inadequate preparation for teaching science and mathematics at the precollege level, and graduates who go into the workforce ill-prepared to solve real problems in a cooperative way, lacking the skills and motivation to continue learning.

“Education studies conducted during the 1980s and 1990s consistently recommended shifting emphasis from teaching to learning,” Springer says. “The message they related was: What students learn is greatly influenced by how they learn. Many stu-
dents learn best through active, collaborative, small-group work inside and outside the classroom.”

Springer describes three broad, interrelated theoretical perspectives on the effects of small-group learning on academic achievement as motivational, affective, and cognitive.

- **Motivational perspective:** The rationale for implementing group goals, rather than competitive learning environments, is that, if students value the success of the group, they will encourage and help one another to achieve.

- **Affective perspective:** Students, particularly women and members of underrepresented groups, have greater opportunities to be heard and to learn by participating in more collaborative and democratic teaching and learning processes.

- **Cognitive perspective:** Interactions among students increase achievement because of more intense information processing. Face-to-face work on “ill-structured” tasks—projects with several possible paths leading to multiple acceptable solutions—facilitate cognitive growth.

The study’s analysis shows that the effects of collaborative learning are largely consistent for different groups, not varying significantly between men and women; SMET majors, preservice teachers, and other nonmajors; or first-year students and other students. There were also consistencies across outcomes of achievement, attitude, and persistence. In addition, the positive effects of small-group learning were significantly greater for members of underrepresented groups, e.g., African Americans and Latinos/as.

“These effects are particularly important,” Springer says, “because they suggest that some small-group work is more effective than purely lecture-based instruction in the gateway courses taken by different kinds of students: majors who aim for SMET professions, preservice teachers who hope to convey the excitement of SMET to students, and nonmajors who hope to gain SMET literacy.”

One important next step is to forge stronger links between learning theory and practice, Springer says. “Although research indicates that small-group learning has significant effects, we do not have a unified theoretical basis for understanding how and why that is the case. A great deal of work remains to gain a greater understanding of how and why small-group learning is effective.”

Funding for the National Institute for Science Education is provided by the National Science Foundation. For more information, contact the NISE collaborative learning web site at http://www.wcer.wisc.edu/NISE/CL1.

Teacher assessments

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tribute to their profession in important ways? These are all outcomes.”

In defining good teaching, there is agreement among the PRAXIS criteria, the INTASC core standards, the National Board’s core propositions, and the teaching standards the WCER team studied in California, Connecticut, and Rochester, NY. This agreement is in alignment with national standards for teaching, where they exist (e.g., NCTM and NRC). While the extent to which teacher assessments are aligned to content standards for students is not clear, the assessments do favor teachers who emphasize advanced content, deep understanding, reasoning, and applications over a strong focus on basic skills and facts alone.

Similarly, the shared conception leans more toward constructivist teaching than toward direct instruction. Does good teaching vary by context, and to what extent is this reflected in the assessments? NBPTS and INTASC take a very strong position in favor of assessing teachers within the context of specific subjects and, to some extent, specific levels of schooling. PRAXIS does not.

Porter notes that there is one important aspect of good teaching that the new assessments have not adequately addressed: The strongest school-controlled predictor of gains in student achievement is the alignment of the enacted curriculum to the measure of student achievement. Yet PRAXIS observes only a few days. Such a small sample cannot hope to capture whether what is being taught is appropriate, Porter notes. INTASC and the National Board take a larger sample of practice, but nothing like a full school year. Further, judging the quality of the content of instruction does not appear to be a major objective. If the new assessments did assess the content of instruction, the task would not be easy to complete successfully.

For more information, see V. Richardson (Ed.), Handbook of Research on Teaching (4th ed., in press), or contact Andrew Porter at acporter@macc.wisc.edu, Allan Odden at odder@macc.wisc.edu, or Peter Youngs at payoungs@students.wisc.edu.
practices in the two subjects and found fundamental differences in the purposes of and emphases on writing. In their emphasis on rhetoric and form, English classes displayed more attention to writing as writing. In social studies, by contrast, writing was used almost exclusively to teach students methods of close reading: Writing received only cursory emphasis and that was limited almost entirely to copy-editing. Though choice of topics was more open in English, editing and revising were more than twice as common in English as in social studies. Such differences clearly show that, even though students write nearly as often in both English and social studies, the curricular landscapes of the two subjects are very different insofar as writing is involved.

“This study raises cautions for writing-across-the-curriculum reforms,” Nystrand says. “It’s good that such efforts have heightened teachers’ awareness about the importance of writing in as many subjects as possible. But proponents often assume writing is categorically valuable. This study shows that ‘writing is not writing is not writing.’” As far as writing development goes, the two curriculum areas Nystrand and colleagues examined defined quite different niches of literacy development.

“Writing plays out differently depending on the interaction of teacher and students in different classroom settings,” Nystrand says, “so it’s important to understand that these contexts are variable and dynamic. They’re constantly changing and changed by the interactions of the participants.” In the classrooms studied, the researchers saw more than simply the effects of classroom discourse on writing, or of authentic questions. They observed different ecologies of learning, constituted by classroom interactions and activities.

Nystrand says that further studies will need to clarify these important and complicated relationships. “Such work should help teachers create a rich language environment and conduct classroom discourse that is conducive to learning.”

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[This article is adapted from the paper “Toward an ecology of learning: The case of classroom discourse and its effects on writing in high school English and social studies,” by Martin Nystrand, Adam Gamoran, and William Carbonaro.]