Individual Ability and Group Work

One of the common objections to group work is that bright, capable students are held back when they share group activities and grades with students of lesser ability. This is of concern to teachers and students. Often very good students strongly oppose group work. They worry that an ineffective group with weak or nonproductive members will compromise their grades. Many openly express the belief that they can do the activity, project, paper, or presentation better on their own and would prefer doing it that way. When bright, capable students with these concerns and beliefs are put into groups, they often compromise the group’s effort by doing all (or most, or the most important parts) of the work themselves, and then they complain about having had to do all the work.

These issues raise interesting questions about forming groups: Should ability be a criterion used in forming groups? Should all the best students work together? Typically faculty form groups of students at different ability levels. But does this compromise what the best students can learn from the group experience?

Two very different studies looked at the role of ability across several different group learning outcomes. Ballantine and Larres (reference below) studied fourth-year accounting students. They formed groups that combined students who had achieved more than 60 percent in a previous course with students who had achieved less than 60 percent in the same course. With respect to the development of skills (such as leadership, verbal communication, ability to get along with others, negotiation, and persuasion), “the responses … provide some level of assurance that students, irrespective of their ability, have enhanced their skills development because of engaging in group-work in a cooperative learning environment.” (p. 175) In other words, both able and less able students in the same group reported that their skills had developed. The researchers elaborate: “Both ‘more able’ and ‘less able’ students reported positive outcomes from the group assessment experience. There was only one difference in response, namely that the less able students felt that the group experience had contributed more to their academic improvement than their more able colleagues.” (p. 178)

This study explored other issues as well, but the findings with respect to the impact of ability are notable for a couple of other reasons. First, the project these groups completed was large (spanning 11 weeks). Second, what the group produced was graded and everyone in the group received the same grade. There was no peer assessment or individual grade, and still group members reported skill development.

Camara, Carr, and Grotta (reference below) also studied upper-division business students. In four sections of a required legal environment of business course, students were put into three- to six-person teams. Half of the teams had members with roughly the same GPA—high, low, or average. The other half were composed of members with significantly different GPAs. Students did not know that they were placed in groups based on their GPAs. Basically, the researchers wanted to know if there were significant differences between these two types of groups, and, if there were, whether they were reflected across ability levels. To ascertain whether there were differences, they looked at three different types of data: student peer evaluations, group grades (on the work done collectively), and individual final exam grades.

Here is what they found: Students in both the homogenous (same GPA) and the heterogeneous (different GPAs) groups gave each other what the researchers describe as “inflated” peer evaluations, although the homogenous groups inflated them to a much lesser degree than the heterogeneous groups did. The differences in group grades between the two groups were not statistically significant, nor were the differences between the individual final grades. The researchers offer this overall conclusion: “Group work clearly is a positive experience for all students notwithstanding their individual GPA or previous level of performance.” (p. 17)

As for the different ability levels within the homogenous groups, “For low achievers, their individual work perfor...
Learning Communities: Benefits Across the Board?

There is no question that higher education tends to get caught up in “fashionable” program innovations, and learning communities could certainly be considered an example. A great deal of research has established that, in terms of retention and persistence, first experiences in college are tremendously important. To better address the needs of entering students, many colleges and universities now include learning community experiences. Typically, learning communities are organized around one of four common models: 1) linked or clustered courses (a cohort of students taking the same group of courses), 2) cohorts in large courses (a group of students in a large course sharing other curricular experiences associated with the large course), 3) team-taught or coordinated studies programs (students taking courses, often with theme-based content, that are team taught by professors from different fields), and 4) living-learning communities (students living together in a residence hall and taking courses together).

Since the early ‘90s, Temple University in Philadelphia has had a well-established linked-course learning communities program. About 10 years in, the program was assessed to “establish whether the overall learning community experience [in terms of the activities in the courses] was the same for everyone.” (p. 262) The school discovered that it was not. The differences were a result, first, of the students themselves. Researchers identified six different clusters of students. In the largest one, “Students were actively engaged in almost all aspects of the learning community experience—from in-class to out of class, on both academic and social fronts.” (p. 256) The second largest cluster consisted of students almost the “antithesis” of those in the first—not engaged with each other or the teacher and not experiencing high levels of activity either in or outside of class.” (p. 256–257). This caused the researchers to conclude, “Learning communities are not uniformly beneficial for all students.” (p. 262)

They also discovered that not all teachers were including activities usually associated with learning communities—things like having students work in groups. The researchers note that various interactive methods fit naturally with the goals of learning communities. “When an institution makes a commitment to the learning community program, it should recognize also the need to prepare appropriately its faculty to utilize teaching methods that are conducive to positive results.” (p. 264)

A variety of other findings support the general conclusion that the learning community experience is not uniform in its effects. “Students enter learning communities with different goals, different reasons, different attitudes about what helps them learn, and different skills. The learning community experience will clearly enhance and improve the educational experience of some, but can be lost on, even counter-productive, for others.” (p. 263)

This is a robust empirical inquiry of a well-established and carefully designed and executed program. It should cause faculty members involved with learning communities, as well as institutions that have them, not to make assumptions about automatic benefits. It’s a study that shows what should have been suspected from the beginning. Learning communities are a powerful pedagogy, but they are not a cure—all for long-standing problems associated with students who are not well prepared for college or do not accurately expect what it will take to succeed in college.


March 2009 The Teaching Professor
Preparing Teaching Philosophy Statements

Although they are a fairly recent innovation, most faculty are familiar with teaching philosophy statements. Many have prepared them for job interviews, for promotion and tenure dossiers, for teaching awards, or for personal benefit. Teaching philosophy statements are narrative descriptions of “one’s conception of teaching, including the rationale for one’s teaching methods. It is seen as a place to voice holistic views of the teaching process, including one’s thoughts about the definitions and interaction between learning and teaching, perceptions of the teacher’s and student’s roles, and the goals and values of education.” (p. 100)

Preparing a teaching philosophy statement can effectively promote the ongoing growth and development of teachers. Authors Beatty, Leigh, and Dean (reference below) explain why. “The process of reflection required to create and periodically revise a statement is as important as, and sometimes more important than, the actual content of the end-product statement.” (p. 100) Some of that growth benefit is lost when teaching philosophy statements are prepared for a venue in which the teacher is being judged. Then there is motivation to prepare a “correct” or “impressive” statement as opposed to one truly reflective of what the teacher believes. However, that is not the concern of these authors.

They are concerned that “philosophy” is often left out of these statements or is described with widely used buzzwords that faculty assume everyone defines the same way. Even though a teaching philosophy statement is a very personal expression reflecting a teacher’s identity, these statements do share common origins. “The building blocks for these personal statements are drawn from the lexicon of basic educational philosophies, which are shared among the community of teachers.” (p. 105)

In the first of two articles by these authors, five philosophies of education are succinctly and clearly highlighted: idealism, realism, pragmatism, existentialism, and critical theory. The review shows with concrete examples how these various philosophies result in very different beliefs and approaches to education. In the second article, the authors propose a card-sorting activity that faculty can use to start seeing how their beliefs about education connect with these fundamental philosophies of education. A set of cards for the exercise can be obtained online—a Web address is included in the article. The exercise can be completed by an individual or a small group, or in a workshop setting.

The authors note there is a benefit of doing the activity with others, because the process of verbalizing beliefs and hearing others do the same often makes those beliefs and their implications more clearly understood. And there is another benefit: “When each faculty member makes his or her teaching philosophy statement available for public discussion, it becomes possible to examine common ground and differences in philosophy across faculty in a department or college or across institutions.” (p. 112) These exchanges do need to occur in a climate of open inquiry. The objective is not to prefer one philosophy over another or attempt to convert those holding one set of views to another. “Because one’s teaching philosophy is such a core element of one’s identity as a teacher, direct criticism of one’s teaching philosophy is akin to a direct assault on the self and will shut down any kind of learning dialogue.” (p. 112)

With a philosophy in hand, the next step is to look at the alignment between these expressed beliefs and the teaching practices that occur in the classroom. The authors suggest that the course syllabus is the best place to look for this alignment. “Choices about assignments and projects, testing, and classroom dynamics should ideally be consistent with elements of one’s teaching philosophy. Philosophical views … come into play as teachers cope with cases of academic dishonesty, imploding student teams, critical classroom incidents, and negative feedback on their teaching.” (p. 111)

Both of these articles show how preparing and regularly revising teaching philosophy statements provide important growth opportunities for teachers. They describe a process that can make preparing such a statement a challenging and rewarding intellectual endeavor, a process that puts the philosophy back into teaching philosophy statements. Both articles are another great illustration of really outstanding pedagogical scholarship done within the boundaries of a discipline but with relevance to every discipline. They are two of the most thought-provoking, informative, and useful articles I have read on teaching philosophy statements.


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Six Causes of Resistance to Learning

A lot of students just don’t seem all that interested in learning. Most faculty (especially those who read publications like this one) work hard to help students find that missing motivation. They try a wide range of active learning strategies, and those approaches are successful with a lot of students but not all students.

Stephen Brookfield writes about students who are beyond being passive about learning—they just plain resist it. He suggests that teachers can’t respond successfully unless they are knowledgeable about the sources of resistance to learning. Here’s a sample of possibilities that appear in his book The Skilful Teacher:

Poor self-image as learners—If students don’t think they can learn, they often resist efforts that seek to make them learn. These are students who, at the first hint of trouble, abandon even fledgling efforts. Any negative feedback just confirms what they already believe: they aren’t smart enough; they will never be able to figure it out. “Developing a strong self-image as a learner—regarding oneself as someone able to acquire new skills, knowledge, behaviors, and insights—is a crucial psychological underpinning to learning.” (p. 217)

Fear of the unknown—Some students resist learning because they are afraid. Students like doing what they already know. They hold on to beliefs that have served them well, especially those passed on from parents. “People committed to eternal verities can withstand years of dissonant experiences and mountains of contradictory evidence that call these [beliefs] into question.” (p. 218)

For many students, the comfort and security of where they are causes them to resist going to new places, especially places where beliefs might be held more tentatively.

Disjunction between learning and teaching styles—Most teachers have experienced this: bright, capable students who resist what’s happening in class. Once a student in my class said, with some passion, “I hate discussion!” “Why?” “I can’t figure out how to take notes off a discussion. What are you supposed to write down?” He was an engineering major and talked often about how clear and organized the content was in his engineering courses. Content is configured differently across disciplines. Sometimes students resist when their preferred approach to learning is at odds with how the information is organized or is being presented.

Apparent irrelevance of the learning activity—Students resist learning when they don’t see how or what an activity contributes to their efforts to learn. If it looks like busywork or a waste of time, students resist. Brookfield points out that this is particularly true when learners are paying for their education themselves.

Inappropriate level of required learning—Students get frustrated and angry when they can’t understand the content. They object to unfamiliar language and the fast-paced delivery of complicated material. The frustration quickly becomes resistance. Brookfield also uses the example of teachers who transfer too much of the responsibility for learning to students too quickly. Students resist. The teacher is asking them to do what he or she is being paid to do.

Students’ dislike of teachers—It’s not a particularly pleasant thought, but sometimes students resist because they just plain don’t like the teacher. Maybe objections to the teacher are justified or maybe they aren’t, but sometimes teachers themselves cause resistance. Brookfield’s list is actually quite a bit longer, but these examples illustrate a variety of sources of resistance to learning. He points out that teachers should not expect to be able to “overcome,” or completely dissipate, resistance. They should work to contain or mitigate its effects.

To do this, he recommends that teachers start by trying to sort out the causes of resistance and decide if the resistance is justified. If the instruction is being aimed at a level way above the level of most students in the class, the resistance is justified and the teacher can do something about fixing the problem.

He offers a number of other useful suggestions. For example, teachers need to build a case for learning. They should explain clearly and often why something is important, why it’s relevant, and why it’s something students need to know. For learners without confidence who are afraid of new knowledge, it helps to create learning situations in which they can taste some success early on.

Finally, teachers will deal more constructively with resistance to learning once they come to accept that it is normal and that students, in fact, have the right to resist. Students cannot be forced to learn anything. All teachers can do is to make the case for learning and work to create conditions that are conducive to it.

No Time for Revision?

By Kevin Brown, Lee University, TN kevinbrown@leeuniversity.edu

The 2008 Faculty Survey of Student Engagement found that “about 47% of faculty members teaching lower division courses and 54% of those teaching upper-division courses thought it was important or very important for their students to write more than one draft of a paper.” It is troubling to note that less than half of the professors who teach first-year students believe that those students should revise their papers and that only slightly more than half of those teaching upper-division courses think similarly. Nonetheless, a significant number of professors think students should do more revision across their educational careers.

The 2008 National Survey of Student Engagement (NSSE) reports that 75 percent of first-year students received instructor feedback on paper drafts, but only 63 percent of seniors did. Similarly, 74 percent of first-year students stated that they received feedback from a peer, friend, or family member, while only 64 percent of seniors did. When it comes to visiting a campus writing center, the numbers are even more problematic: 31 percent of first-year students made such a visit, but only 19 percent of seniors did.

If professors believe that preparing multiple drafts helps students write better papers and think more deeply about a subject, then why don’t they have students doing more revision work? The answer is obvious: It takes too much time. First, professor time, for reading and providing feedback, and second, class time that should be used for covering the content. I’d like to suggest several ways students can do multiple drafts that address both of these time issues.

First, peers can help with feedback on early drafts. In my upper-division courses, I have students turn in a rough draft to me but also to a group of students that I select to be their peer editing group. I have a sheet that guides those peer groups through the process. It mirrors the issues I look for when grading a final draft. The drafts are read over the weekend, and then feedback is delivered during one 50-minute class period. It might be possible for this feedback exchange to happen outside class or online.

From some of my colleagues, I learned an abbreviated approach to conferencing with upper-division students. I read the entire rough draft, but focus on only one or two pages, which limits my time investment but still enables me to deal with major concerns like thesis or evidence. When I conferenced with first-year students this semester, I told them that I would read their first and last paragraphs and one body paragraph of their choosing. This approach enabled me to look at how they used evidence in their papers, as well as their theses and conclusions. It also shortened conferences from 10 minutes to five minutes, which, given my 60 composition students, saved five hours.

Using peer editing groups and reading rough drafts outside of class do not affect content coverage in the course. Many professors believe that they will need to give up days of class if they are going to integrate any aspect of writing into their courses. Although I would argue that spending class time teaching writing is valuable and not a waste of time, there are still ways to integrate writing with course content. Let me share a couple of examples.

In an American novel course I teach, I have the students read criticism on the novel we’re discussing and write short response papers. I offer feedback on those papers, which students can then use not only to improve their general writing skills, but also as a foundation for their longer papers. When students write about course content, they must dig more deeply into the reading at the same time they are developing their writing skills.

Last, almost every college or university has a writing center on campus. We often encourage our first-year students to visit it, but we then think upper-division students shouldn’t need to. Since most writing centers are staffed by upper-division students who perform well in writing courses, graduate students, or even composition faculty, upper-division students can still benefit from visiting such centers. Any opportunity to get feedback from someone who writes well is a chance for valuable input. I think we ought to encourage, if not require, our upper-division students to spend time with a tutor at the writing center.

Having students write multiple drafts does not need to take up more instructor time or take away from course content. Instead, it can add to both. Revision improves the quality of student papers, which saves professors time grading and means students spend more time thinking about the content they have probably come to understand more fully. Perhaps professors need to revise their ideas about how they teach writing.

Going Global by Using Local

By Anne Cullen, Bond University, Queensland, Australia
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The effort by academic institutions to meet the demands of an increasingly global and complex economic environment requires educating students to succeed in the worldwide marketplace. Although the proliferation of study abroad opportunities for both students and faculty and the expansion of partnering arrangements and visiting lectureships are positive developments, the current economic situation may put a damper on the ability of faculty, students, and institutions to participate in these endeavors. Thus, “going global by using local” may need to become the catchphrase for university internationalization. At-home internationalization engages students and faculty with international experiences and with international students and faculty in class discussions and curriculum development efforts. This local diversity can facilitate broader cultural understanding and provide benefits for everyone.

Internationalization of the classroom, however, does not occur accidentally. It begins with an instructor’s desire to internationalize the curriculum and the classroom, and then uses careful planning and curricular structures to accomplish that goal. Early on, students must come to understand that global perspectives are relevant to the content of the course as well as to their future vocations. Creating an international classroom begins on day one, when class instructors let students know that this class will be different from any they have experienced previously. We start out with the following three simple rules that let students know where they stand and what is expected of them.

Rule One: Respect each others’ opinions. This rule reinforces the polite culture of academia and reminds students that they are all part of the same academic community, regardless of their nationality or experiences.

Rule Two: Arguments are great fun, but argue the point, not the person. Anyone who personalizes the argument will be shut down immediately—and you should be prepared to step in and do so. This rule not only reinforces Rule One, it also signals to students that the teacher will take action if a student makes a personal attack. It also empowers international students to claim a bigger learning space and to become involved in discussions. Supportive conditions help non-English-speaking students overcome the hesitation of less-than-perfect verbal communication.

Rule Three: This has always been a loud and noisy classroom, and you shall keep it so! This rule grants permission for enthusiastic interaction among students as well as between students and the instructor.

These are simple rules that establish the parameters of appropriate cross-cultural communication. International stories are welcome in the classroom, but they must be told when they are relevant to the course content being considered.

Establishing an internationalized classroom also necessitates incorporating relevant learning outcomes and determining how those outcomes will be assessed. Regardless of class format, the goal is to create an open space for participation by all and for everyone to bring their (inter)national experiences to the class. All teaching styles can be adjusted, with minimal effort, to incorporate internationalization strategies. In the most traditional teaching format, the lecture, for example, faculty can emphasize certain learning points by highlighting personal international experiences. For instance, when clarifying the differences between authoritarian and democratic regimes, a personal story about travel documents in an authoritarian nation brings home lessons about not only the vulnerability of the traveler, but also the rights of citizens in different regimes.

Introducing the “real world” into the classroom demonstrates to students the relevance of global perspectives. It also breaks down the barriers between students and focuses their minds on the global impact of whatever the class might be studying. Achieving such results is rewarding for instructors and broadening for students, especially when one considers that the class has gone global by using local—the international experiences and expertise of those close at hand.

Individual Ability

FROM PAGE 1

Introducing the “real world” into the classroom demonstrates to students the relevance of global perspectives. It also breaks down the barriers between students and focuses their minds on the global impact of whatever the class might be studying. Achieving such results is rewarding for instructors and broadening for students, especially when one considers that the class has gone global by using local—the international experiences and expertise of those close at hand.


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A Blog, a Physics Course, and a Change in Student Attitudes

Does it matter if students leave courses with a positive attitude toward the content area? Maybe successful acquisition of content is all that really matters. Maybe teachers don’t need to be concerned if students “liked” the content. As physics professors Duda and Garrett (reference below) point out, this is about more than whether or not students “liked,” in their case, physics. The positive attitudes toward the discipline that teachers need to cultivate “encompass an appreciation of how physicists think and operate; the value of physics as it applies to other fields, such as engineering, biology, and medicine; and the applicability of physics to everyday life.” (p. 1054)

Regrettably, students don’t always leave introductory science courses with positive attitudes. In fact, Duda and Garrett cite a number of studies showing that students actually leave physics courses with more negative attitudes than they brought with them to the course. That should be of concern for all sorts of reasons, but most compelling, as Duda and Garrett note, “if we care about learning, we need to pay attention to students’ attitudes.” (p. 1055)

Duda and Garrett decided to try to impact student attitudes in an introductory physics course by incorporating a blog into the course. The blog was designed as an extra-credit assignment (although later in the research it became a required part of the course). The instructor posted several blog entries per week and students received two points for reading and posting a thoughtful response. (“Very cool” was not considered a thoughtful response.) If students blogged regularly they could raise their overall grade in the course by 2.5 percent. The content of the blog mirrored content being covered in class, but it addressed real-world problems and issues. So when electrostatics was being covered, there was a blog entry about the physics of lightning. In fact, the blog linked to a YouTube video of a car being struck by lightning.

To test the impact of the blog experience on attitudes toward physics, the researchers used an instrument developed by others and used in previous research. They compared pre- and post-class attitudes of students in the courses with the blog to those of students in control sections with no blog. “We found that students who did not participate in the blog generally exhibited a deterioration in attitudes towards physics as seen previously. Students who read, commented, and were involved with the blog maintained their initially positive attitudes towards physics.” (p. 1054) Students in the sections where the blog was used were surveyed about the blog specifically, and their reactions were “overwhelmingly positive,” even in sections where the blog became a required assignment.

In addition to the impact on attitudes, the researchers note that having to read the blog and post comments forced the students to do more reading and to learn about physics topics that were not covered in class. They also repeatedly had students who never participated in class interacting regularly on the blog.

The article discusses how much time was involved in preparing the blogs and identifies resources that were helpful in doing so. Obviously, once a collection of posts has been developed, the posts can be reused, and if they need to be updated, that can be accomplished with a modest time investment. Given the very positive outcomes, the time required seems well worth the investment.


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Use Personal Essay Assignments to Encourage Substantive Discussion of Course Content

“Why are teachers afraid of sentences that begin with ‘I feel …’ or that draw on personal experience?” Margaret Mott asks, repeating a question she read in an essay early in her career. Most faculty don’t encourage students to use personal experience because it is seen as too subjective and without much intellectual substance. Mott has students in her political theory course write three personal essays. Her motivation derives partly from the need to “displace the preponderance of passivity I find in their essays.” (p. 207) Not only does the academy object to the personal, but students themselves have been trained to stay out of their writing. “High school students know from experience that the more they talk about themselves, the more will be taken away.” (p. 207)

Mott’s carefully designed writing assignments creatively weave the first-person voice and personal experience into explorations of the political theorists being read in the course. Here’s her second five-page essay assignment:

“Begin by describing a situation in which you felt at odds with a professional (a doctor, a lawyer, a therapist, a teacher, a social worker). Show us (don’t tell us) how your experience of the event differed from that of the professional. Let the details of the story convey all the confusions of this experience. Stop and breathe. In the subsequent section, use one or two passages from Montaigne to analyze this experience, to unpack the confusion, and to lay out the terms of power. Finally, what did
Avoiding Mediocre Lab Reports with Creative Assignments

Robert Badger, a professor of geology, describes the lab reports he wrote as a student in an introductory geology class. “I wrote tired, uninspired drivel, merely recounting a vague version of what the professor or teaching assistant had recited, without trying to analyze for myself what it was I had actually observed.” (p. 58) He promised himself that if he ever became a teacher he would not subject his students to “such tedious and pointless exercises.” (p. 209)

Badger did become a teacher, and he avoided what he had experienced by having field trips but dispensing with write-ups. What he discovered, though, was that students could not answer even basic essay questions about what they’d observed on the field trips. So he added the usual lab report, got the expected poor results, and knew he had to do something better.

He decided to try a version of an assignment he’d completed as an undergraduate. In one of his introductory geology courses, he asked students, “Who’s paying for your education?” Most looked a bit confused. Badger continued, explaining that no, their parents were not paying and no, they hadn’t taken out a bunch of loans; instead, each student had an eccentric uncle who loved geology, in fact just happened to be a geologist. This Uncle Ralph had agreed to pay for college provided his niece or nephew enrolled in and successfully completed a geology course. And Uncle Ralph required an occasional letter describing the geology course, especially the field trips.

The letters submitted to Badger in response to this assignment weren’t perfect. Students still misunderstood some of what they had seen, but Badger believes “the enthusiasm and quality of their geological perceptions is far superior to what I would receive if I merely requested a routine lab report.”

Based on his success with letters, Badger designed other creative writing assignments. In an upper-division integrated studies program, Badger partners with an ecology professor, and they jointly have students do a two-week lab project on a nearby stream. Students are assigned a section of the stream from which they collect all the aquatic organisms, which they then present in maps, tables, charts, and diagrams. Initially students prepared what Badger describes as “mediocre” scientific reports. The two professors changed the writing assignment and had the groups imagine they were professional river guides who had been sent to scout the river for potential rafting trips. “As potential guides, they had to be educators for the paying public and able to identify the flora and fauna within the stream,” Badger said. “The papers we received were an improvement.” (p. 62)

In another geology assignment, Badger has each student find his or her hometown on a geologic map and use the map to determine the age of the rocks in the area. Students then use other materials from the course to determine what the environment was like during the time period when these rocks were formed, and write a story (first person, present tense) about what it would have been like to be there during that time.

“It is hard to measure the success of these writing methods as teaching tools. I know I am more satisfied with the results than before I initiated them.” (p. 64) Badger thinks that these assignments work well for students because they allow...