

The posting below looks at some strong arguments for supporting more small group instruction even in difficult budgetary times. It is by Pamela Robinson and Jim Cooper and is adapted and updated from the original 1995 article, Ten Reasons College Administrators Should Support Cooperative Learning by Jim Cooper, which appeared in Cooperative Learning and College Teaching, Vol. 6, No.1 Fall 1995. 2. Reprinted with permission. For references to publications sited in the posting please write to Jim Cooper at: [jlcooperjim@netscape.net].

Our SCALE-UP project supports all of these reasons organically. However, since the completion of Del Norte 1010 and our SCALE-UP FLC, it seems there is now little interest in pursuing development of more such classrooms. Perhaps this may rejuvenate some of that earlier energy...

Ten Reasons College Administrators Should Support Small Group Instruction

It is no secret that resources available to colleges and universities are very limited, with little prospect for relief in sight. It is equally true that the demands made on these institutions by the unique composition of our student populations are straining our capacity to cope. Faculty members are graying and most were never trained in pedagogy, particularly the pedagogy most effective for the diverse students who have come to us in recent years. Administrators are attempting to address a myriad of faculty, community and student concerns in an era of downsizing. Structured, research-based small group instruction (hereafter called small group instruction) is a relatively cost-effective method for dealing with a substantial number of issues confronting college administrators and faculty. Unlike many of the interventions already in place for dealing with the ten issues described below, there is a firm empirical and theoretical base which indicates that small group instruction can have an impact on these issues.

Reason 1. Increasing student retention. Why students leave school has been studied by Vince Tinto, Lee Noel and others for several decades. The most powerful predictor of student retention is the nature of his/her involvement with the institution. Students who report positive interactions with other students and with faculty are much more likely to continue in college, particularly in the first few months when most attrition occurs. Well-structured group work builds in the kind of positive interactions for which Tinto, Noel and others have argued.

Reason 2. Appreciating diversity. This issue continues to confound college administrators and faculty. We would like to create an environment in which tolerance, if not appreciation, of diversity is the norm. Racist, sexist and homophobic incidences continue to plague our institutions of higher learning as they do society at large. Most administrators and faculty want to foster appreciation of diversity. But what can faculty and administrators do that is both effective, cost beneficial and within their comfort levels? Many faculty members are uneasy speaking directly in class about issues relating

to diversity. Small group instruction is a relatively straightforward teaching technique that most faculties can manage and which holds great promise for fostering positive attitude change toward women, minorities and others. And it doesn't require the major shifts in curricular content implied in some interventions designed to foster appreciation of diversity. Research by Light, Tobias, Kagan, Triesman, and others suggests that women and some minorities prefer and may perform better with cooperatively-structured small group tasks. These findings extend from elite institutions to colleges with open enrollment, and content areas such as freshmen success courses, traditional liberal arts classes and science, mathematics and engineering content.

Reason 3. Using technology in the classroom. Researchers at Concordia University (Montreal), North Carolina State, San Diego State and Cal Poly Pomona have completed syntheses of the impact of television, two-way interactive video and other forms of technology in the classroom. Based on hundreds of comparisons, they found that these technologies were about the same as more traditional instructional formats in fostering achievement among students. In cases where televised instruction surpassed more traditional forms of instruction, Witherspoon (1994) found that it was the frequency and quality of student-student and student-teacher interaction that distinguished the more effective from the less effective televised classrooms. Those who look to technology to solve the cost problems of traditional instructional approaches need to take a close look at the pedagogical underpinnings of the change they are examining. Simply televising a lecture to 1000+ students is not a means for fostering quality instruction, whatever the cost. It is encouraging that much of the recent research on distance education, such as that of Philip Abrami and his Concordia University (Montreal) colleagues' points to carefully planned student-content, student-student and student-faculty interaction as powerful ways of humanizing and enlivening many technology applications to the classroom and producing higher levels of achievement.

Reason 4. Developing critical thinking. There is a difference of opinion in the professional literature regarding the specific definition of critical thinking (Kurfiss, 1988). But such diverse theorists as Kurfiss, Paul, Halpern, Martuza, Palincsar and King all agree that small group problem solving is a powerful way to foster critical thinking and deeper processing of course content. Carefully-structured small group instruction requires students to actively and deeply engage with academic content. Pupils are challenged by peers who stimulate cognitive processes such as problem clarification, justification, elaboration, and evaluation. Researchers and practitioners interested in the cognitive development theories of Perry, Belenky and Vygostky have also called for small group instruction (Cuseo, 1993; Gabelnick, et al., 1990; Kurfiss, 1988).

Reason 5. Fostering the goals of liberal education. In 1993 Alexander Astin completed a landmark study of what makes a difference in undergraduate education. He published the work in an influential book entitled *What Matters in College: Four Critical Years Revisited*. Astin's research and more recent complimentary work by Terenzini and Pascarella (2005) have provided small group instruction with significant empirical support for the power of student-student and student-teacher interaction. Astin found that curricular issues were not significantly predictive of most goals of liberal education.

Instead, student-student and student-teacher interactions were the best predictors of a host of liberal education goals, including commitment to helping others, interest in cultural events, appreciation of diversity, problem solving and leadership development. These interactions were also positively related to higher scores on the GRE, MCAT and LSAT exams. Joseph Cuseo (2011) writes persuasively of the power of small group work in fostering a number of liberal education outcomes, as do Spencer Kagan (2011), Karl Smith (2011) and David and Roger Johnson (2011).

Reason 6. Preparing students for the world of work. For years, higher education has engaged in a debate pitting the goals of liberal education against more narrowly-focused attempts to train students for the workplace. Small group instruction is a process variable in education in which both sides of this debate may agree. The American Association for Colleges and Universities recently reported a study in which business leaders identified interdependence as a fundamental construct in current business environments, including teamwork skills and the ability to collaborate with others in diverse group settings. Spencer Kagan recently reported on work by the National Association of Colleges and Employees in which interpersonal skills and teamwork skills were rated as among the highest valued worker characteristics by employers. Small group instruction may be one thing that the classics professor and the business professor can agree on in shaping a course of study for the twenty-first century.

Reason 7. Building a sense of community. When we examine the world around us, it is difficult to feel encouraged about the social fabric of the country and the world. Wherever one looks there appears to be a balkanization of interest groups and a sense of us against them. Ethnic cleansing, militia groups and apparently mindless terrorist activities are some of the manifestations of this lack of community. How can educational institutions begin to address these issues? Intentionally-structured cooperative group work is not the solution to all that ails this country and the world. But it is something that an administrator or faculty member can do that can have an effect on a significant number of students preparing to take their places in society. These students are the public school teachers, the nurses, the accountants, the politicians, the CEOs (and perhaps most importantly) the parents of the future. Researchers at the University of Minnesota and Concordia University (Montreal) have published research syntheses which document the efficacy of cooperative group work in promoting such outcomes as social support, coping with stress, conflict resolution and psychological health. If we can begin the process of developing a shared concern for others, we may begin to turn back the mindless, egocentric world view that seems to be dividing campuses, communities, and countries as we try to learn from the past and plan for the future.

Reason 8. Energizing faculty/faculty development. Most faculty value teaching and strive to do the best job they can in the classroom. But few of us were trained in pedagogy. Our friend Jack Michael used to say that college teaching was a displaced form of revenge. We do to our students what was done to us. He meant the remark humorously (we think). Reports of teaching practices by Becker and Watts (2008) and others indicate that the overwhelming per cent of class time is spent with students passively engaged with course content. The lecture is still the predominant technique used by a large majority of

instructors. When faculty not trained in pedagogy first begin teaching and meet with student resistance, for whatever reason, it is our experience that dissatisfaction with students and with teaching in general sets in early in too many academic careers. On the other hand, if faculty learn skills, such as how to use cooperative learning and see the impact of well-formed cooperative structures on students, the effect on faculty is often dramatic. Once we identify students as willing junior colleagues in a joint intellectual exploration, not as the enemy seeking the highest grade for the lowest expenditure of effort, the effect on our attitudes toward the profession is often dramatic.

Reason 9. Responding to learning styles. The assessment of learning styles and cognitive styles and the empirical base for their efficacy is a subject of some debate among researchers. Nonetheless, many students and faculty do express strong preferences for different modes of presentation, styles of processing information and for differing motivational systems. Women and some minority groups express preferences for more collaborative and less competitive systems of instruction. Meta-analyses concerning the relative success of cooperative versus competitive motivational systems in improving problem solving found that cooperative motivational systems were clearly superior (Qin, Johnson, & Johnson, 1994; Springer, Stanne & Donovan, 1999) and have been replicated by research reviews of Johnson & Johnson (2011) and others. Similar results have been found for a number of other student outcomes in the cognitive and affective/attitudinal domains. At the very least it can be argued that cooperative learning presents a change from an overreliance on more passive modes of instruction that have been criticized by national commissions, accrediting agencies and discipline groups for the last 30 plus years.

Reason 10. Using cooperation in university governance. Alexander Astin wrote an insightful article (Change magazine, 1987) in which he asserted that, although higher education laid claim to such notions as collegiality and community, in fact most levels of academia model competition and striving for status. It is difficult to argue for a commitment to public service and altruism with our students when many members of the academic community are locked in bitter struggles between departments, schools and colleges for limited resources, between faculty for career-making tenure decisions and between institutions for a top ranking in U.S. News and World Report's yearly ratings of colleges and universities. Robert Slavin of Johns Hopkins University and David and Roger Johnson at the University of Minnesota have begun changing the governance structure of K-12 schools using cooperative learning principles with promising results. Learning communities' proponents have joined the ranks of those seeking more transparent and collegial governance structures.

Obviously there is nothing magic about this listing of exactly ten reasons to institutionalize research-based group work in higher education. There are many other issues which could be addressed, such as assessment, accreditation, writing across the disciplines, freshmen success programs and math/science reform. All are areas in which cooperative learning principles have been successfully implemented or have the potential for successful use. When resources are hard to come by and interventions often have little or no impact on institutions, carefully-structured small group procedures hold great

promise for affecting a wide range of outcomes central to the several missions of our colleges and universities.