This paper looks at using collective critical thinking about issues as an assessment technique instead of or in addition to written tests. A substantial literature review examines the role of assessment and alternative strategies such as group oral exams in classes where cooperative activities and learning have been emphasized. The review reveals that a group oral exam works effectively. In a non-threatening environment, students use individual input and reflection as well as group skills to synthesize group responses. Examples of use of group oral exams as an assessment procedure are described, including the group dynamics and outcomes: (1) a final group oral exam for an experimental class which focused on cooperative activities, panel discussions, forums, etc.; (2) a fourth-grade class preparing a letter to a state senator regarding rain forest destruction; (3) a mock school board meeting; and (4) a final exam from an experimental class. Findings from the use of group oral exams indicate that such exams reduce anxiety, promote critical thinking and analysis rather than just retrieval of information, are applicable in many disciplines, develop consensus building skills, and demonstrate democracy in action. Though not applicable to every content subject or unit of work, where it is an appropriate assessment/evaluative instrument, group oral testing appears to be very effective. Examples of final exams and study guides are included in an appendix. (Contains 16 references.)
DIVERSITY IN ASSESSMENT PROCEDURES
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Introduction

When we begin using alternative teaching strategies in our college classrooms do we ever wonder if the paper and pencil tests are appropriate? Does it strike us that testing is different, in that we use cooperative group work, debates, forums, panel presentations, yet the main assessment strategy involves some type of written work, a paper, an essay, or a multiple choice test? Somehow testing for content acquisition and application seems to be a world apart from the way the students/pupils in today’s classes are learning.

As teachers of teacher we model various teaching/learning strategies, but we may not be modeling a variety of assessment strategies. Some of us use the portfolio but consider it ancillary not equivalent to a "test". Portfolios may show development, they may represent a type of performance, writing a lesson plan or creating a unit, but is it really an assessment tool of the same order as a "test"? From my colleague’s presentation we may enlarge our perception of the role of portfolios.

When I was faced with the dilemma of mostly group work, including group papers as well as group oral presentations, the typical paper and pencil test seemed inappropriate. I had tried several written examinations, both essay and multiple choice, in the class, but the results appeared to be incompatible with the quality of work the students, individually and collectively, had been performing. When the emphasis is upon cooperative learning, with an issues oriented approach including much reading/researching, then the assessment instrument should reflect these strategies (Kopack-Hill, 1992). The emphasis, in my experimental classes, has been on group work in a discussion mode that reflects group resolution of problems rather than individual responses; i.e., collective critical thinking about issues. Paper and pencil exams seem inappropriate to the learning methods used in class. Since the initial trial, I have used this technique
numerous times. The latest was a mock school board meeting.

Review of Literature

Owens (1991) writes that some people are not good at taking written tests. Some people tend to express themselves best through oral communications, not the written word. Jones (1987) believes that there is strong evidence to support multimodal approaches as being the most desirable in reducing test anxiety. According to Change, as noted by Jones (1987), test anxiety appears to be a multidimensional problem requiring techniques designed to address a number of factors that produce test-anxious behavior and a process of teaching the proper skills to remediate the deficiencies. These statements and the theory of multiple intelligence of Howard Gardner reinforces the contention that we need more than paper-and-pencil test in our classrooms. Armstrong in 7 Kinds of Smarts describes the characteristics of these multiple intelligences and facilitates our exploration of our own multiple intelligences. He, peripherally, addresses the need for teachers to be cognizant of multiple intelligences and to use this knowledge in our teaching to enhance pupil learning. Kopack-Hill in Seven Goods Ways to Learn describes how she utilizes the work of Gardner and Armstrong to enable the teachers and first grade children in her school district to use these 7 good ways to learn and to assess. "...if most of our assessment techniques [are] centered on verbal/linguistic and logical/mathematical intelligence, we would miss 5/7 of our effort" (Kopack-Hill, 1992, p. 23). The time has come to explore multiple intelligences with assessment at all levels of learning. As we come to recognize the validity of Gardner’s multiple intelligences and the profoundness of Owens’, Jones’ and Kopack-Hill’s statements must be recognized and addressed. We need to be cognizant of the multiple ways people learn while we are teaching and while we are assessing and evaluating. While we are using multiple methods of teaching, from hands-on-manipulation and cooperative learning groups to on-the-job learning for adolescence, we find ourselves wedded to the paper and pencil type of assessment. We need to create alternative
assessment techniques; no longer is paper-and-pencil tests adequate assessment. Since some people are not as facile as others in written communication skills, we need something besides the portfolio of written work, too. Individual oral exams take time.

An alternative assessment that uses oral skills and cooperative learning groups, may be an option we can use in the classroom, something each teacher can use in some of the assessment areas. An alternative assessment technique is the large group oral exam. The approach being developed in this paper appears to be unique. There are oral exams as reported by Dressel, Tschirner, Jarausch, Young, Gutstein and Goodwin, and Nelson just to name a few. While we can learn from their experiences, their approaches are not like the one in this report. This researcher found the anxiety level of the students to have been reduced to near zero, which is not Dressler's findings (Dressler, 1991). In addition, this assessment strategy implements the ideals of democracy. As we progress through the process of this assessment procedure we will discover the resemblance to the early democratic process in Colonial America, the town meeting, where each individual is heard, where each individual affects the outcome of the meeting and the legislation proposed for the community.

What is the role/purpose/intent of assessment especially in light of an emphasis on cooperative learning? If we devote much of our class time to small group work and discussion, is it appropriate to have paper and pencil type individual assessment? This new approach does not imply abandoning individual accountability nor deleting paper and pencil tests. There is a place for the essay exam and for the multiple choice exam. What is being advocating is the use of other, at times more appropriate, methods for assessment. The method we use to evaluate a person's performance should reflect the procedures used in helping him or her learn the content or tasks. If we are teaching critical thinking skills, then present a situation requiring critical thinking skills to ascertain the student's level of competence. To verify writing across the curriculum, check the writing in say, a math class. What is the quality of writing an individual does when
writing out how she or he approached and finally solved a math problem or writes a letter to his or her representative in Congress or the state legislature?

If a class does engage in cooperative learning, why have children take an individual test? Why not assess the competency of the individual by evaluating the quality of the groups' performance and the individual's contribution to the group? This does require the instructor to be "everywhere at once", cognizant of what each group and individuals within the groups are doing. It is not an easy task. The instructor needs to validate the very subjective nature of any evaluation decision. Teacher becomes, not a proctor, but an active though mostly silent, participant.

Dressel (1991) reported on her research on the formal oral group exam, notably one that involves critical thinking. She concluded that "the oral exam reflected the students' understanding of the content discussed in the course, their ability to operate within the gestalt developed throughout the term, to establish appropriate criteria, to generate possibilities, and to evaluate these possibilities using appropriate criteria." (Dressel, 1991, p. 2). The students are involved in the practice of critical thinking. What she described is exactly what has been experienced with this writer's students and what current trends in K-16 education indicate as being necessary for success in the 21st century.

Dressler found her individual presentations of content to the class generated an excessive nervousness (Dressler, 1991). Just the opposite was found in the experiences reported here; there has been a respectful openness and responsive freedom in the class. Part of this non-anxiety emotional experience may stem from the fact that "females prefer to engage in more independent individual learning activities" (Skipper, 1988, p.2). Independent learning within the small group was most effective. Skipper also reports, from McKeachie and Lin, that "women are more interpersonally oriented than men." (Skipper, 1988, p.5). The cooperative learning groups have been very effective and supportive. Males respond very well to the oral exam structure; research indicates that "males
express a higher preference for giving oral reports in class (Skipper, 1988, p.4). Estrick (1984) cautions that "Girls are invisible students; boys ... call out eight times as often as girls do." We need, through social skills in cooperative learning situations to allow both males and females to have equal access to oral responses and success. Through the structure of the large group oral exam we find a positive force for female success (Skipper, 1988).

The group oral exam works very effectively. It brings in both the cognitive and affective domains. It provides for individual input, reflections and verification and inter- and intra-group support for the presentation. It is non-threatening since there is no right or wrong response, only well documented agreed upon proposals. Critical analysis and critical thinking, 2 of several of the higher order assessment levels are required. The students use synthesis when they create their small group set of responses and more dramatically when they consolidate the sharing session notes on the board. They project analysis in their ability to identify parts that belong to the issue at hand, while being aware of the community in which we all live. Valuing and organization as well as the earlier stages of the affective domain of awareness and reality, are in evidence at the individual, small cooperative group and large group levels.

An example

The latest example of this assessment strategy was a school board meeting. The first assessment problem was to create a set of national education goals. One of my favorites assessment problems is the fourth graders' letter about the rainforest destruction. Here are their stories.

The emphasis in my experimental classes, however, has been on group work in a discussion mode that reflects group resolution of problems rather than individual responses. As stated before, a paper and pencil final exam seemed inappropriate to the learning methods used in class. Thus I ventured forth with what might be a new frontier—one oral exam for 30 or more students. I made the
decision to try something different in the last weeks of the term. I did not know if it would work, I did not know if anyone had ever done this kind of testing before, and I had no idea how I could evaluate the quality of the work produced let alone defend this potentially bizarre test technique (if challenged by a student or the Administration). But I decided this was it. I would create a situation in which we would need to use all the content we had studied in class, we would use all the research resources we had on campus, and as a class of 32 students they would create their goals for American education—I was not satisfied with the 6 Goals of America 2000, and we had repeatedly returned to them throughout the 14 week study of education and society, history, philosophy and issues. With fear and trepidation, I approached our 8 o’clock final. The students had been given a sheet of instructions, but not the actual issue to be addressed. They were told to bring notes, references, texts to class for they would have to defend whatever they said to their peers in their cooperative learning groups and then to defend any challenge to their recommendation or solution when the idea was presented to the whole class. Further instructions were presented along with the issue to be resolved at the beginning of the 2 hour final exam.

The format for the large group oral has been for the class to break into their usual cooperative groups to develop a consensus on the topic presented. During a sharing time, each group presents one aspect, one concern, one decision that the group has evolved, repeating the rounds until the groups’ efforts are exhausted.

In the small groups each idea has to be supported and accepted before it is presented in the sharing time. Time is needed to enable the learning groups to create organization for their responses to be shared. An outline of ideas created during the sharing time and ensuing discussion, which tends to be lively and orderly, with substantial support for positions taken. Agreement usually is reached rather quickly on the specifications for the solution/resolution, and the phrases for areas of consensus emerge. Consensus building among groups is amazing. The resulting product reflects the thought power of the entire class. The experiences
reach beyond this writer's wildest expectations. Not one imagined fear has been manifested. These people grapple with the issues, realize the limitations of human and economic resources and create an oral essay reflecting the issue presented. The defense and objections for each thought presented, as well as the support have been as marvelous as the final product.

I patrol the room, never making one comment. I listen for the quality of information, originality and creativity of ideas being generated, and I listened for the speakers. I need to know who are the leaders of each group and within the class. I need to verify for myself that everyone of the students is actively involved in the small group discussions.

During this first attempt I was rather disappointed. The same groups of 3 to 5 students had been functioning (some more successfully than others) for the entire term. They were more or less random selection, who sat next to whom on the first couple of classes. I had already learned who were the students willing to let someone else carry the load. The first 15 to 20 minutes were disappointing...the chatter, the floundering was oppressive. I thought my assessment strategy was a bomb. Then there was a shift. Like a light suddenly being turned on in a dark room. Ideas began to emerge from the various groups. People challenged these ideas, pages began to be shuffled as an idea creator sought support from an authority for the idea. Others in the group found support for or against the idea, and the challenge was on. Every group was deeply involved in the task at hand. Even those groups that had been peripherally functioning during the term, were successfully pursuing the assignment.

The enthusiasm and joy the students exhibit are overwhelming. In spite of the realization that the first time this assessment technique was used, the resulting grade would be an A or an F, one grade for all; unless there was an unusually unresponsive group member. Anxiety was absent. Synergy abounds. The students were free to visit and listen to other groups-sharing ideas, hitching on to ideas, brainstorming, nothing was right or wrong-merely could the group/individual support a position. One or two even sauntered
about the room for a minute or two. But on the whole, because they had some freedom, they seemed content to explore their own group's wealth of knowledge. The majority remain on task with their group. Just knowing they have some freedom creates the stress-reduced environment.

One other experiment/examination had the objective to fax a letter to the state senate hearing on the school choice program. The class was to explain its concerns, proposals/options and referenced support for the groups' decisions. An other example occurred when a fourth grade teacher's class created an oral letter, the culminating activity on their rain forest unit. Writing the letter was part of the integration of language arts, science, and social studies. They wrote the letter, based upon the notes generated by the large group oral exam, to their representatives regarding the destruction of the rain forest. They presented their concerns, the effects of this destruction on climate, food supplies, the growing population and apparent unconcern for the welfare of the population by the government and "wealthy" of the "rain forest country". It was a poignant cry of children for the life of our planet. Every child participated; every child was involved; every child in that class had a comment to make, and the teacher recorded each and every one. The teacher had the class compose, orally, the letter from the arguments. Collectively, in language arts they wrote their letter, painted their pictures of the rain forest and mailed the package to the representatives. Here is democracy in action. Social actions from children, representing Banks' Level 4, The Social Action Approach to multicultural reform; it is appropriate to authentic assessment in the school culture, too.

Multicultural education has many approaches for curriculum reform. Banks (1994) considers the social action approach the highest level of reform. Whenever the large group oral examination technique has been used it has resulted in student decisions on important social issues and their taking actions to help solve them.

The latest experience with this strategy as been a mock
community school board meeting. Students were randomly assigned to one of several groups: single and childless couples, parents of school children, single parents, elderly citizens, board members, civic and business leaders, and teachers and union members. The topic was school choice, a proposal by the school district board of education as an answer to at-risk children in the school district. The participants fulfilled their roles to perfection. In this phase of this developing assessment strategy, the nature of the topic and the newly assigned citizen group membership occurred prior to the day of the examination. Thus they had time to find and assimilate documentation to reflect the position of their respective representative groups. The arguments and counter proposals of the various groups (business had a counter proposal to fund a high school that was school to work based with post secondary education tuition grants available to participants upon completion of the curriculum/program), were powerful. The board, after an hour and three quarters, recessed for 5 minutes and decided the arguments proposed by the citizens deserved further study; they had decided to reconsider their initial proposal for creating a choice program for their district, based upon a Michigan community's successful choice program. This was citizenship in action. It represented the diversity of one community and the effects of proposals supported by hard evidence.

Evaluation for Grading

Any assessment apparatus needs to reflect not only the goals and objectives of instruction, but the methodology of instruction. It should reflect the philosophy of the school and classroom teacher. If we believe that education is a natural, pleasant experience, so should the evaluation methods we use reflect these beliefs.

People of all ages recognize bias, unfairness and unwarranted rewards. As educators we must improve the quality of assessment comparable to the changing methods/strategies we bring to the learning situation by creating dynamic learning environments in the classroom.
behavior of the group and individuals within the group. It is revealing to observe how often a member is actively involved and contributing to the group. By perusing the classroom, the teacher can also ascertain if the group is on task. The StRoBe provides concrete evidence to support the teacher’s instinct that individuals within a group are successfully participating.

Conclusions and Implications for Teachers

A number of people come after the exam to express their pleasure and surprise over their lack of anxiety. The pride and pleasure at the knowledge gained from others and their recognition of their own content based knowledge is indicative of the positive situation this form of oral examination creates. The students respect the ideas of others, they accept others’ beliefs, giving and requiring support for positions, learning patience, learning not to be the dominate leader, and yet fighting for their ideals when they can be supported. All these attributes are critical for a democracy to survive; for the individual to develop creative thinking, critical thinking, decision making, problem solving, shared responsibility. There is a tendency to reflect that, "If I fail, we fail; and if I succeed we succeed." A better thought has emerged, "If we fail, I fail and if we succeed, then I succeed."

What are the implications for you and your students/pupils?

Large group oral exams tend to:

1. Reduce anxiety
2. Accept that evaluation and assessment accompany activities
3. The whole is greater than the sum of its parts--the gestalt
4. Growth through diversity/multiplicity (tunnel vision lessens in group dynamics)
5. At some point, cooperative effort is applicable anywhere, but sometimes it is not appropriate everywhere.
6. Critical thinking, critical analysis are promoted in the classroom not just the retrieval of information; i.e., we use higher order learning levels.
7. Applicable in many disciplines: in math class--solving one or more problems together; in computer class--all real world computer programmers work in teams; in English--the play, dramatic or interpretive reading require large group oral performance/presentation.

8. Developing consensus building, not only in small groups but in large groups, such as they, as citizens will encounter in community, school, and work situations

9. Democracy in action: students participate in social action situations reminiscent of the town-meeting of the Colonies of the late 1700s, and which some New England towns still maintain.

10. Teachers must be cognizant of what each group is doing and the role of each member in the group; identify early in the course the "slackers" and watch them at the exam, they often "come alive" at the crucial time. As the teacher you may need to indicate that an individual may not succeed, while the groups succeeds; StRoBe will help with this phase.

This assessment strategy is not for every content subject nor applicable for every unit of work. Where it is an appropriate assessment/evaluative instrument, it appears to be very effective. Preparation for life, for work, with critical thinking is the hallmark for the large group oral examination. Be it for fourth graders, our pre- and in-service teachers, or the people we as teacher educators prepare for the classroom, the large group oral examination accommodates diversity in the classroom; it adds one more diverse assessment strategy to our portfolio.
Selected References


Nelson. (1986). Implementing oral exams as part of the school exam system. *Proceedings of the National Modern Languages
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Appendix
Guidelines for developing a set of goals for the education of children/youth in the United States of America in the 1990s and beyond.

1. The USA is a democracy, what goals, if any, need to address this fact in order to ensure the continuation of the democratic dream that is more than 2300 years old?

2. To what extent should, if it could, education (via the school system) effect the social order, the moral/ethical order of the USA?

3. Should the educational system address the personal satisfaction/enrichment of our citizens?

4. Will be able to provide for the global and national needs of the world with minimal competencies for our students in the school systems? What should be the areas of competencies? How specific or general should these competencies be identified by goals?

5. Should the goals recommend/prescribe assessment outcomes? If so, what and how?

6. To what extent should the educational system supply trained/educated workers for industry, business, government? Should this be a goal of the school system?

7. Is financing of education part of the educational goals?

8. To what extent can public education be expected to educate the masses? Is this the same issue as equal education for all? What is the minimal/maximum education the public school system should provide?

9. Goals should be broad enough to allow individual states and school districts to be just that, individual while maintaining the base needed for commonality and equality.
Final Examination - One (1) essay question

Reform the American School/Education System: The goal is to improve the educational opportunities of each and every child. How shall we do it?

1. National Goals--Are they needed? Why or why not?
2. National Curriculum--Is it limiting/restrictive?
3. National Assessment--Will it improve the quality of the child's learning?
4. Choice--Is it a better way to improve the quality of education for each child?
5. Administration--Is Site-Based Management a way to improve the quality of education for each child?

Sample for consideration: Choice Program
a. What kind of schools to participate? CA was considering any school of 25 or more pupils; Milwaukee, WI allows only non-religious schools.
b. What, if any, geographic limits? MN allows anywhere in the state; Milwaukee allows only those schools within the school district.
c. How shall we fund the Choice program? Vouchers, as in Milwaukee and as proposed in CA, other creative options?

Test will be open book, open notes and similar to regular class structure. That is we will work in cooperative groups, come together for round robin sharing and write our cooperative large group proposal. Everyone must actively participate or face the consequences of a reduced grade; essentially the grade is A, C or F.
activities will be turned into Dr. Boe at the end of the day.

Monday: Moderator will call the Town Meeting to order at 10:30 a.m. Each group, in turn, will present its recommendation with some of the arguments (about 3-5 minutes). This will require about 35 minutes. The Moderator then will conduct the meeting so as to allow group presenters to debate the merits of their or others' recommendations and provide support against other proposals. No one may speak longer than 2 minutes. Five minutes before class ends, the class will either vote or decide by consensus which is the best recommendation for this issue to be resolved/solved/remediated.

Assessment/evaluation criteria:

degree of group participation—within each group and within the discussion, the Town Meeting

quality of the issue to be addressed by the Town Meeting

preparation of the group for the presenter's address/debate/rebutal

quality of the recommendation with its support/defense

quality of the total community's decision/recommendation for the issue

degree of respect, modeling of democracy, empathy of and for constituents

quality of records maintained, and possibly of the final oral and/or written recommendation

quality of the Moderator and Leader of the Day as well as group leaders preliminary leadership

overall participation by each member of the community

Grading:
A—well researched, debated recommendation appropriate to the issue under consideration with total community action and support
B—well researched, debated recommendation appropriate to the issue being considered with mild "disruption" of the quality of debate and/or resolution. Final recommendation might not be the best solution based upon available information.
C—average research, typical community debate with some "disruption" in the sense that arguments are not well founded. Final recommendation may not be in the best interests of all parties.
D—we won't even consider this possibility.
Directions for preparations preliminary to oral exam on at-risk children in the schools:

In groups of 4-5, select a leader/facilitator, a recorder, and a presenter.

Role of leader: to keep group members on task to ensure each group member is actively involved in project work, researching, discussing, etc. to periodically have recorder report on the information gathered up to that point to reassign work needs, if necessary to fulfill goal

Role of recorder: to maintain a record of the discussion content during any meetings of the group, in and out of class

Role of presenter: to report the group's decision, recommendations, arguments, etc. during the large group discussion and Town Meeting

Role of problem solver: each member of the group may assume this role as appropriate; the problem solver thinks aloud, explaining each step taken, reading research/references and/or notes, searching for information, recalling information, drawing if it helps, constructing and testing hypotheses.

Role of listener: everyone is a listener. Listening means being active, working with the problem solver/speaker; listening for gaps in the thinking, listening for errors or inconsistencies in the arguments, the listener asks questions, the listener does not give solutions before the speaker is finished; speaker and listener exchange roles and work together as a total group.

Wednesday: select one or two areas that leads to at-risk children--each group will present its argument to support its choice of topic:

Once the class as decided upon the issue to be addressed in the Town Meeting, each group will work to prepare its solution/resolution/recommendation for remediation of the issue. Assignments for research will be made/selected (recorder records who is assigned what), and research will begin.

Friday: each group will check in with the Leader of the Day (assigned by Dr. Boe, democracy not present.), each group will inform Leader of the Day what they have done and expect to have done by the end of class. The Leader of the Day will preside over the election of a Moderator for Monday's Town Meeting. At the end of class, the Leader of the Day will check-off whether the groups have in deed achieve their goals. The class attendance and summary sheet of the day's
Problem to be resolved by this Town Meeting:

We the people of Lentz City, 53223, resolve to end the at-risk problem in our school district that may result from grade retention.

School Board statistics indicate the following areas of concern in Lentz City:
- gifted and talented
- physical handicaps and special education
- youth pregnancy
- other?

Research has indicated solutions may be found by exploring:
- year round schooling
- financial allocations
- other?

Other topics of consideration:
- crack babies
- alcohol fetal syndrome
- gender
- minorities/race
- language barriers
- poverty
- head start
- uniforms
- AODA
- sex education
- class size
- cooperative learning
- parental and community involvement/responsibility
- home visits
- active learning
- caring teachers
Question: What can the American Education System provide for the "At-Risk" Children?

Who is "at-risk"? What are the characteristics of "at-risk" children?

What, if any, role has multicultural education in this problem and solution? Is equity and diversity part of the problem/solution?

Since Americans already spend one of the largest amounts of money on per pupil education, is finances the answer?

What is the role of values, morales, ethics in this problem?

How has the history of education in America affected/effected the problem we call "at-risk" children?

What about the multiple intelligences of Gardner, active learner theory, multiple teaching strategies (including cooperative learning groups), in the resolution of helping "at-risk" children learn and adjust to contemporary life?

How has the change in the business/industry/manufacturing/farming communities affected the situations for and of "at-risk" children?

Is the "at-risk" child a new phenomena of the latter quarter of this century?

Criteria:

1. Accuracy of information, including characteristics of the "at-risk"
2. Integration of concepts outlined in the "question" above.
3. Quality of ideas/solutions, etc. Are they reasonable? Can they be implemented?
4. Documentation is provided.
5. Has consensus been developed at both the small and large group level?