A Tool for Characterizing Class Culture in Classes Applying Alternative Assessment and Classes in Transit, in the Field of Science Education

MICHAEL ORLY *(Chk1363@netvision.net.il)*
Bar-Ilan University and Achva academic College, Israel

ABSTRACT   *Methods of evaluating achievement are drawn upon the different approaches used in evaluation, that is, achievement goals are drawn from teaching goals. This research was carried out while developing a database of examination assignments for junior high science and technology students[*1]. The database includes thirty assignments examining content and skills included in the science and technology syllabus (1996). All assignments are based on the alternative assessment method, each one comprising of a students' assignment and a teachers' guide, including a rubric for monitoring the work. The goal of the present research was to examine whether the change in evaluation methods (from concluding or traditional evaluation to constructive and alternative assessment) has also affected class norms. Research sampling included four junior high classes having completed their science studies. Results of interviews and observations were analyzed qualitatively; questionnaires were analyzed quantitatively. This paper presents a proposed research tool for identifying significant factors that should be taken into account considering pupils and teachers in transition to alternative assessment in sciences. Among the results, we present a "norms scale," based on the norms we found from the children's perspective. The proposed tool helps to characterize, map and describe norms of behavior in a class going through transition from a traditional evaluation to an alternative assessment method, in science education. A state of transit in class between two evaluation cultures is not an isolated stage, but rather tends to continue as an ongoing situation. It can be assumed that as long as elements of both evaluation approaches are combined in the education system, classes will remain in a constant state of transit, always in flux between two cultures of evaluation. For this reason, we find it important to draw characteristics, or construct a set of categories, by which to observe the evaluation process in the context of teaching.*

KEY WORDS: *Alternative assessment, evaluation, formative assessment.*

Review of Literature

Culture and Class Culture

Schools are cultural sites, not only in that they present the students with monumental intellectual achievements, but also in their bond with the community and their driving cooperative spirit ((Tishman, Perkins, & Gay, 1996).

---

1 * The research conducted under the supervision of Prof. Eylon,

What is culture? Anthropologically, culture means defining borders for a group of people sharing common values, customs, habits and rituals: a system of definitions, explanations and behavioral evaluations by social norms, concept of human nature, natural phenomena, interpersonal relationships, time, activity, symbols, art and historical development (Brislin, 1981). Culture links these different aspects of our lives into a meaningful whole by linking one detail to another (Foster, 1969 in Sodowsky, 1991). Oberg's cornerstone study (1960) introduced the concept of 'culture shock' – the psychological reaction of an individual encountering another culture, an encounter resulting in conflict between the individual's identity and the values, concepts and social norms of the new culture (Kelley & Meyers, 1995).

In the educational context, each class has its own unique sense of teaching and learning. It is evident in the ways students and teachers react to each other, in their mutual expectations, in their shared oral patterns and understanding of what is commonly appropriate, what is interesting and valuable. It is only natural that classes differ in their sense of *culture*. Some classes are rigid, others more open, some appreciate answers while others appreciate questions, but every class has its culture. This aspect of education makes the school experience more powerful than the sum its parts (Tishman et. al., 1996).

The quality and quantity of learning depends on many factors not commonly associated with what is traditionally termed *learning*. This complex set of factors affecting the learning process is called *climate* (Darom, 1989), referring to both class climate and school climate, being significantly interrelated. *Climate* has been described in many ways, being a very general concept. A few definitions suggested in the education system (Darom, 1989):

- The personality of the school.
- The psycho-social environment in the class, as expressed by the shared concept of students and teachers.
- The gamut of group processes occurring in the interaction between teacher and students and between the students themselves within the school context.

These different definitions provide a picture of the complexity and diversity of meanings associated with the concept of climate.

Class climate (or class culture) should be distinguished from school climate or culture, which includes psycho-social elements at a greater level of inclusion (Frazer & Walberg, 1991). Class culture is affected by many factors, one of which is norms. *Norm* is a collective social concept. It is the often implicit expectation of group members to act in a certain way. The norm is not a written law; it may follow or oppose the judicial law. Each group develops its set of norms according to its needs, goals and way of life (Darom, 1989).

Class norms regarding evaluating achievement can vary between classes. For instance, is the class quiet during an examination? Do students work by themselves? Is there a discussion with the teacher during the examination? Is the examination considered an imposing, fate-deciding threat, or a means of improving learning? One question on which this research focused was: Can a set of norms be identified in a class going through a transition from a *traditional examination* culture to an *alternative examination* culture?

Approaches in Evaluating Achievement

The method by which achievement is evaluated depends on the approach applied to evaluation; the goal of assessment depends on the goal of teaching. There are several approaches to the question of "what are the goals of teaching?" What is required from teaching so that students succeeed in their lives, during and after school hours, at present and in the future?

The Traditional and the Alternative Approach to Evaluating Achievement

A psychometric evaluating achievement paradigm is based on the traditional teaching approach. One premise of the psychometric approach is that learning achievements are universally significant, that is, the examination score has the same meaning for each student, because consensus may be reached regarding the meaning of educational goals. The validity of the psychometric examinations is based on this assumption. The contextual approach, on the other hand, claims that in a multi-cultural society, a variety of meanings, differences, and contradictions are inevitable, making universal consensus impossible and undesirable.

Another premise of the psychometric approach is the separation of goals and means to their achievement. From this premise, it follows that measuring experts are qualified to construct the examinations and decipher them, regardless of the teaching that took place in class. The contextual approach, on the other hand, does not separate goals from means in school.

A third premise of the psychometric approach is a separation between cognitive and affective aspects in evaluating achievement. The contextual approach views cognitive and affective aspects (such as motivation, determination, desire etc.) as integral components of the thought process.

Finally, the psychometric approach prefers and promotes a system where monitoring and control are centralized. Standard examinations adhering to this system are a means of categorizing students, but their benefit to learning is minimal. The contextual approach, on the other hand, prefers the decentralization of control, and therefore promotes transferring evaluation from the exclusive realm of pedagogical administration to the hands of teachers, students, and the community that the school serves (Birnbaum, 1997).

Examination Culture and Assessment Culture

Consider two cultures of evaluating achievement: an evaluation culture centered on traditional quantitative evaluation and an alternative, qualitatively-based assessment culture. Introducing a new evaluation culture causes some collision between the norms of two different cultures, resulting in the formation of new norms among teachers and students as well. This is a general, recurring phenomenon. As long as two evaluation cultures exist in class, the traditional and the alternative, students and teacher will continue to operate in a state of *transit*. This is why it is important to identify the state of transit between the two cultures and to construct a system of categories for examining these processes in the context of evaluation.

This preliminary research attempts to identify important dimensions, which should be considered and applied in preparing teachers, or students, for alternative assessment.

Examination Culture

Within examination culture, in an external evaluation context, teaching and evaluation are considered two separate activities. The first is the responsibility of the teacher and the second is the responsibility of the measuring expert. Even in internal examinations constructed by the teacher, the examination plan, the selection of components, the development of criteria for evaluating performance and the process of grading are done without student participation.

Most tasks are structured as multiple-choice requiring brief response. Most have only a single correct answer and examine a set behavioral goals. These components examine isolated units of knowledge with no consideration of context. Most examinations of this sort encourage memorization of what the students hear in class or read in textbooks. These are usually paper and pencil examinations, administered in class under pressure, each student working on his or her own, isolated from others and restricted from using accessory material. This means that the first draft written by students under pressure and limitations is often the basis for decisions regarding them. Examinations mainly appreciate the final product and mostly ignore the process leading to it. Results are usually reported by a single numeric grade.

The results of these examinations are used primarily for comparison, for the interests of governmental officials in comparing between students and between schools of different districts or different countries. These examinations do not answer the need of teachers and principal in schools to directly support the learning process (Blok, Otter, & Roeleveld, 2002). Further critique of traditional examination is that such examination negatively affects learning, as teachers and principals are pressured to prove their schools successful, making the learning examination-oriented at the expense of focusing on the learning process (Herman, 1992).

Assessment Culture

The need for alternative assessment arose from the dissatisfaction of educators with closed examinations, dating back to the 1970s. Some define alternative assessment as any evaluation differing from the standard multiple choice examinations (Birnbaum, 1997). Other definitions consider a direct examination of student performance on assignments relevant to his/her life outside the school. Gardner (1992) defines assessment as obtaining information regarding the skills and potential of the individual for a dual purpose: acquiring feedback useful to that individual and producing data useful to the community. Gardner (1992) claims that assessment differs from examination in the preference of assessment for techniques that produce data along ongoing daily performance, whereas examination is considered an imposition given its use of formal instrumentation in a neutral, dissociated situation. Some go further and speak of two different cultures: a culture of examination and a culture of assessment (Grant, 1998). The culture of assessment emphasizes evaluation in teaching, substituting an examination isolated from the specific teaching process in class with an examination that feeds back and leads the teaching and learning process as it supplies evidence of student thought patterns and abilities in the context of studied material. The concept of student position and responsibility in the evaluation process has also varied. From a submissive

subject to obscure evaluative processes, the student has become an active partici-
pant in setting the standards for evaluation, and in evaluation itself, of his/her pro-
gression through the curriculum. Reflection on and awareness of the process are
required of the student. Students conduct ongoing dialogue with the teacher
regarding assessment, and participate in evaluating the achievements of peers.
Alternative assessment has many forms, all characterized by accessories and tools
for real performance. Assignments are authentic and carried out in real or simu-
lated situations. The assignments are intended to examine high levels of thinking,
being challenging and interesting. Evaluating performance includes process and
product.

Reporting results has also changed. Instead of a single grade, a detailed per-
formance profile is charted, that is, a shift from the numeric to the descriptive.
These reports are supposed to supply more significant feedback on the managing
of learning. Alternative assessment applies a variety of tools and methods, such as
assignments, simulations, portfolios, work-logs, team work, exhibitions, observa-
tions, interviews, oral examination, evaluating colleagues, etc. Assignments exa-
mining active comprehension, or comprehension performance (Perkins & Blythe,
1994) are emphasized, used as evidence for integrative interpretation of the evalu-
ated student's performance. As part of a growing change in educational systems
around the world, Israeli policy makers have also adopted the alternative assess-
ment method (Ben-Perez, 2005).

The current research was carried out, while developing a database of exami-
nation assignments for junior high science and technology students. The database
includes thirty assignments examining content and skills by the science and
techonlogy syllabus (1996). All assignments are based on the alternative assessment
method, each one comprising of a student's assignment and a teacher guidebook,
including a rubric for monitoring the work. Assignments in the database vary in dif-
ficulty level, skills examined, duration required for completion and working me-
thods (some group work, others solitary, some home work and others lab work).

The goal of the present research was to examine whether the change in evalu-
ation method (from concluding or traditional evaluation to constructive and alter-
native assessment) had also affected class norms. The research describes and ana-
lyzes norms of classes by combining alternative assessment and traditional evalua-
tion. The research question was, what happens in classes during alternative assess-
ment examinations, from the point of view of teacher and students, considering
the following aspects: The atmosphere in class, discourse in class with and of the
students, student achievements, teacher work and tutoring habits, teacher feed-
back, guidance, and examined student's self assessment.

Sampling

The sample of the study consisted of four junior high classes studying biology,
one eighth-grade class and three seventh-grade classes. Each class has completed
the study of one of these subjects: materials structure, properties and processes –
elements and compounds, and on the subject of structural phenomena and
processes in living organisms – life characteristics and reproduction in organisms.

Method

Prior to the reported research, a pilot research was conducted with the parti-

cipation of seventh graders who had completed studying the subject of materials and "living water." Observations and interviews were made in these classes, on the basis of which a questionnaire was constructed for future interviewing. The current research focused on four junior high classes, having completed their science and technology studies. The three assignments were administered experimentally. The assignments were given as class work with no preperation beforehand. During the alternative examination, the classes were observed. A student completing his work filled out a feedback questionnaire. Several students were chosen following the observation for further interviewing.

Results of interviews and observations were analyzed qualitatively; questionnaires were analyzed quantitatively. The following remarks describe the three assignemnts observed during the examination. (All assignments follow the biology curriculum for science and technology in junior high).

1. *Material assignment.* The examination subject is "materials: compounds and elements." The alternative assignment is built as a card game requiring students to link different aspects of knowledge in material properties, a sort of puzzle.

2. *Life characteristics assignment.* The examination subject is "life characteristics." The assignment comprises of two parts, the first tending toward traditional evaluation and requiring students to characterize by category. It may be assumed that a similar assignment, using different items, is mentioned during the class studies of the subject. The second part of the assignment tends toward alternative assessment, being of an imaginary and creative nature, requiring the students to go through a decision-making process relating to life characteristics.

3. *Reproduction assignment.* The examination subject is "reproduction," and the assignment involves the issue of organizing knowledge representation. The students read a text exposing them to concepts in reproduction.

Findings

Quantitative Analysis of Feedback Questionnaires Regarding Attitudes to Alternative Examination

At the end of the alternative examination, students filled out a questionnaire of attitudes regarding it. Table 1 presents students' answers from four different schools, following three different examinations.

Analysis of students' attitudes toward the alternative examination they experienced indicates, as shown in Table 1, that most students find the alternative assignment more interesting than an ordinary test. They also felt that it examines comprehension of material studied in class (*i.e.,* the examination is relevant), that it gives them a better chance to succeed, and that it is instructively clear. Statements 1, 3, 5, 6 received the highest scores (~3 on a 1-4 scale). Slightly following these were statements 2, 4, 7, which means students find the assignment relevant to recently studied material, and do not find the assignment more difficult than an ordinary test. A bit more than half of the students stated they would like to be examined in this way on other science and technology subjects. Table 1a also shows

Table 1
Descriptive Statistics Related to Student Feedback Questionnaires, Regarding Examination Assignments

Statement	Materials (n=21)		Life characteristics (n=41)		Reproduction (n=36)	
	Mean	SD	Mean	SD	Mean	SD
1. Instructions for carrying out the assignment were clear	2.95	1.16	2.87	0.89	2.92	0.87
2. Assignment was connected to material recently studied in class	3.48	0.60	2.83	0.99	3.33	0.63
3. This assignment is more interesting than an ordinary examination	3.19	0.98	3.05	1.02	2.53	0.94
4. This assignment is more difficult than an ordinary examination	1.90	0.94	1.08	1.04	2.29	1.00
5. This assignment gives me a better chance to succeed	3.10	0.98	2.93	0.88	2.75	0.87
6. Assignment examines whether I understood the material studied in class	3.38	0.59	2.80	0.96	3.03	0.81
7. I would like to be examined this way in other subjects of science and technology	3.00	1.00	2.34	1.09	2.43	1.04

• **Answers were scaled 1-4.**

Table 1a
Positive Answers (in %) Regarding Time Frame and Teacher Assistance During Alternative Examination

Question	Materials (n=21)	Life characteristics (n=41)	reproduction (n=36)
8. Did you complete the assignment in the time allotted?	95	77	88.6
9. Did you require teacher assistance while carrying out the assignment?	76	72	61.1

that most students managed to complete the assignment in the allotted time and most required teacher assistance in doing so. Although help was needed, about 3/4 of the students stated they required teacher guidance during the "materials" and "life characteristics" examinations compared to 61% in the "reproduction" assignment, perhaps due to the fact that the latter more closely resembles a traditional test, and as such was more familiar.

Components 2, 4, 6 and 7 differ between the "materials" assignment and the two classes working on the "life characteristics" assignment. These differences may be explained by the nature of the assignment, "materials" being a playful assignment (a sort of puzzle), while "the capsule of life" assignment emphasizes thinking and learning skills, as well as originality and creativity on the subject of life characteristics.

Analysis of Interviews and Observations

Based on the interviews, observations and mapping analysis, *we have constructed a tool to help characterize, map and describe norms of behavior in a class going through transition from a traditional evaluation to an alternative assessment method.*

Although the assignments differ from one another and concern different fields of knowledge in junior high science and technology, we identified common forms of class behavior during the alternative examination. We noticed that introducing a new evaluation approach to class causes a conflict of norms and a formation of new norms (among teachers and students). This seems to be a constant, recurring phenomenon, as a result of which we may always expect to find two evaluation cultures in class, which remains constantly in the state of transit between these cultures. For this reason, it is important to construct a system of categories or characteristics to examine these processes in the context of evaluation. Based on the findings of the current research and literature of previous research, we have constructed a *"norm spectrum" for the characterization of norms* as experienced by the students. The norm spectrum enables us to examine the class or teacher in a state of transit between evaluation methods and map the process. Table 2 describes the norm spectrum and the identified aspects.

Discussion

During transit between two evaluation cultures, the evaluation process goes out of balance, and a state of confusion and uncertainty is characteristic. This situation enables us to identify and characterize aspects of norms at the stage of encounter between two cultures of evaluation.

The current article does not present results based on norms found in classes but rather an initial research tool by which we are attempting to identify important aspects worth considering when working with teachers and students toward alternative assessment. The norm spectrum, we have presented, was constructed examining the norms that were observed, from the point of view of students. It proposes a tool with which to examine a class or teacher during evaluation. The spectrum points to aspects and enables mapping.

The research can and should be continued, focusing on teachers. In order to establish and validate the tool, the experiment should be repeated and the sampling broadened. Our research concerns norms observed in class during transit between two evaluation cultures, a situation which is not unique. It can be assumed that as long as elements of both evaluation approaches are combined in the education system, classes will remain in a constant state of transit, always in flux between two cultures of evaluation. For this reason, we find it important to draw characteristics, or construct a set of categories, by which to observe the evaluation process in the context of teaching.

Table 2

Norm Spectrum for Mapping Transition Process from Traditional to Alternative Assessment in Science Education

Aspect	Range		Definition/details	Examples/ citations
	Traditional	**Alternative**		
Preparation for examination	Comprehension and memorization	More than one way to understand	The 1st stage of examination is home preparation; in traditional examination the children know in advance and prepare for the test: repeat and memorize the material before being examined. For the alternative examination there is no specific way to prepare. Proper comprehension of material is necessary but other elements are taken into account, which the child does not know or is not required to prepare for	Traditional: students stated that traditional examination is "memorizing and learning by heart" whereas of the alternative they said "I did not know how to prepare for it"
Test format	Known format	Unknown format – different from the usual	Students expect the traditional format of the examination (such as "open or closed questions"), whereas they are required the effort of understanding the assignment requirements in the new and different alternative format	In the traditional tests "you either know open or closed questions" whereas in the alternative examination the students stated: "the assignments are just different from a test" or "this is much more different"
Examination instructions	Standard instructions	Varied instructions	In traditional examination the instructions repeat themselves, for instance: "read the following and answer", whereas in the alternative examination every assignment is different from the previous one so the instructions are different two. Furthermore, the instructions are different from those given in a traditional examination	Instructions are familiar in the traditional examination; this is why a student stated: "you already know". In the alternative examination the instructions are different from what the students is used to, and students have stated: "all these instructions were too difficult".
State of mind	Stressful	Pleasant/fun	Traditional examination	In positive reactions the

Table 2 (continued)

during exami-nation			is linked to a stressful state of mind and the common phenomenon of "test anxiety". With regard to the emotional aspect the reactions to the alternative examina-tion were mixed, some positive and some nega-tive	students stated that they enjoyed the examina-tion, that it was "easy", "not stressful", arousing "curiosity", was "interest-ing, nice and amusing". Not all enjoyed the alter-native examinations, there were also negative reactions: "it was stress-ful", "annoying" and "harder". Test anxiety was prominent in all the interviews. Students stat-ed the alternative exami-nation differed from the traditional in that they felt "less pressured".
Skills required of students	Cognitive	Cognitive, affective, social, psy-chomotor	Traditional examination often measures cognitive skills like memory, mem-orization, written expres-sion, comprehension etc. The alternative examination additional-ly measures affective, social and psychomotor skills like creativity, drawing, pasting, plan-ning, application and evaluation	<u>Regarding the cognitive aspect:</u> There were positive and negative reactions. The following are quoted from students that expe-rienced difficulties: "it was too complicated" or "it requires a thorough understanding of the material". Other students reacted positively in the cognitive aspect, described the cognitive difficulty they encoun-tered and found interest in coping with it. Here are some reactions: "interesting, requiring a lot of thinking, four [components] should be properly combined, it is more interesting than an ordinary test, required me to try and recall life characteristics". Some students were able to describe the difficulty in the requirement to think multidimensionally to complete one of the assignments: "it was diffi-cult to think of some-

Table 2 (continued)

| | | | | thing which was both a life sign and important for future generations", or a student who understood additional skills and general knowledge detailed: "you need more general information to decide on this issue." <u>Regarding the affective aspect</u>: positive and negative reactions to the alternative examination were also noted in the emotional aspect. On the positive side, students mentioned they enjoyed the examination, said it was "easy", "not stressful", arousing "curiosity", was "interesting, nice and amusing". Not all enjoyed the alternative examinations, there were also negative reactions: "it was stressful", "annoying" and "harder". <u>Regarding the social aspect</u>: Few students mentioned the social aspect: "you speak to friends, there are more laughs, it's amusing and nicer than writing in the notebook all the time". <u>Regarding the psychomotor aspect</u>: students mentioned other skills required by alternative compared to traditional examination: technical skills, "you need to paste and arrange", "matching things" or "here it'll be different and harder, the slots, the pasting." |
| Discourse with teacher | Minimal discourse | Much discourse, vital for process | During traditional examination discourse with the teacher is minimal and based on a recur- | Most interviewees mentioned they needed more help from their teacher: "I asked the |

Table 2 (continued)

Achievements	Student achievements				
				ring ritual. In the alternative examination much discourse was observed between students and teacher, discourse which was vital for completing the assignment	teacher many times, more than I would ask in an ordinary test". Most students explained: "yes, here you have to explain the purpose of the game and in an ordinary test... you already know; some questions I did not understand and required the assistance of the teacher." That is, the rules of the examination were different and the students needed a more detailed explanation from their teacher compared to a traditional examination with known guidelines. This phenomenon was also significantly noted in observations
Achievements	Low		H	In traditional examination students receive a grade at the end of the process. Students experiencing difficulties usually get a low grade, whereas the alternative gives these students a chance to get better grades. The reverse is true of those considered good students. Achievements can not be predicted in advance, making the examination fairer. Furthermore, the alternative examination allows the student to learn something new during the process or to improve knowledge during examination	In traditional examination, students are not expected to learn something new, only to demonstrate achievements. The findings show this is different in the case of alternative examination. Few students failed to learn something new during examination and stated: "I new this" or "we learned this in class", but many mentioned they had learned something new while being examined: "I learned about... and all other things of which I did not know". The assignment may have improved knowledge: "it expands knowledge", "I learned more from this assignment". Most students said: "this assignment gives me a chance to succeed."

Table 2 (continued)

	Atmosphere in class during examination		During traditional examination the class is silent, under threat of penalty for whoever speaks. Work is solitary and the atmosphere stressful. During alternative examination students are in discourse between themselves and with the teacher. The atmosphere is looser and calmer	Regarding the atmosphere in class some students stated: "I enjoyed it", "I was not under pressure" or "it was like class work", but some students found the open atmosphere a disturbance: "the noise of the children in class broke my concentration."
Atmosphere in class	Closed	O		
	Silence	Interrupted sile		
	Solitary	Cooperat		
Transparency of assessment	Teacher only; at the end of the process	Student participates; during the process	In traditional examination the teacher grades at the end of the process. In alternative examination the student knows her/his achievements as s/he's carrying out the assignment. These differ in two respects: who evaluates? The teacher or both teacher and student? At the end or during the process?	Students could evaluate the assignment and their achievements in it during the examination and immediately following it. Most students could tell if they succeeded or not in the alternative examination, and some gave convincing explanations as to why. Some students completing a traditional examination claimed they must wait for "the teacher to pronounce grades" and only then will they know whether they succeeded or not. The following is cited from a student that did not succeed but was able to explain his lack of success: "as below the usual, also because I had not prepared for it." A student who could estimate she answered properly said: "I feel I succeeded because I reviewed my task and discovered I was right." Few students could not estimate their achievements and stated: "I don't know".

The following is a discussion of examples of norms observed at the state of transit to alternative assessment, and suggestions for future considerations:

Students did feel the alternative assignment reflects their content knowledge; they did not think that the assignment also examines other skills. Only the teacher mentioned that she regarded these different aspects examined by the assignment, including content and skills. Students experiencing difficulties stated pasting and matching was hard; these may refer only to technical skills.

Whereas traditional examination values product and skills, like memorization, and does not value the process itself, the alternative examination assignment emphasizes the process, not just the product (Birnbaum, 1997). Students have become "used to" a process valuing content and product, and faced with an evaluation process that also examines other skills (cutting, pasting etc.) and process, they mentioned having difficulties, but did not identify (or very few identified) that they were being evaluated by other aspects.

Regarding discourse with teacher in class, findings show that the teacher explained more than s/he had in a usual test. It appears this is due to the fact that the assignment differs from the examination with which student and teacher are familiar (as one student mentioned: "in an ordinary test the norm is either open or closed-questions"). The assignment is different. Instead of questions, there is a game, and every "player" must change a behavioral habit and ensure s/he understands the rules of the new game.

In traditional examination, the rules of the game are known by teacher and student, like the student being required to work independently and receive minimal assistance from the teacher, whereas in the case of alternative examination the learner is an active participant in evaluating his/her achievements and progress, and as emphasized above all else in the interview – evaluation is discussed by teacher and students (Birnbaum, 1997). Both teacher and students mentioned the interaction between them being much greater in the alternative examination.

This indicates that students and teachers are used to certain behavioral norms during traditional examination, and when faced with an alternative examination, both participants – teachers and students – must alter their behavioral norms, causing uncertainty and increasing discussion in class during examination.

Another issue that came up among interviewees was their feeling about their achievements. As suggested by literature concerning alternative assessment (Birnbaum, 1997), most students claimed they could estimate whether they had succeeded or not. The children stated that they could estimate their achievements during the assignment and immediately following it – this is one of the goals of alternative assessment.

As for the difference between students, it is difficult to draw a profile of a students who enjoyed or did not enjoy an alternative assignment, as some students who did not enjoy it were defined by their teachers as excellent students and others as weaker students, while of those who did enjoy it, some were described by the teacher as poor or mediocre, and others as good students.

The students who enjoyed the assignment stated that they especially liked not being under pressure, and had a fun and interesting experience. On the other hand, students who disliked the assignment stated they felt very pressured, they had a hard time and could not understand what was required of them. It is inte-

resting to note that approaches to alternative assessment assignments do not distribute according to conventional learning achievements (e.g., good, mediocre, poor) but rather by a different key. This is compatible with the relevant literature, and can be the subject of future research.

Bibliography

BLOK, H., OTTER, M. E., & ROELEVELD, J. (2002). Coping with conflicting demands: student assessment in Dutch primary schools. *Studies in Educational Evaluation, 28*, 177-188.

BRISLIN, R. W. (1981). *Cross-cultural Encounters.* New York: Pergamon Press.

FRAZER, B. J., & WALBERG, H. J. (Ed.) (1991). *Educational Enviroments.* Oxford: Pergamon Press.

GARDNER, H. (1992). *Assessing in context: The alternative to standardized testing.* In B. R. Gifford & C. O. Connor (Eds.), Changing assessments alternative views of aptitude, achievement, and instruction, (pp 77-119). Boston, MA: Kluwer.

GRANT, W. P. (1998). *Educative Assessment.* San Francisco, CA: Jossey-Bass.

HERMAN, J. L. (1992). What research tells us about good assessment. *Educational Leadership, 72(5),* 74-78.

KELLEY, C., & MEYERS, J. (1995). CCAI: Cross-Cultural Adaptability Inventory Manual. First NCS printing, U.S.A.

OBERG, K. (1960). Cultural shock: Adjustment to new cultural environments. *Practical Anthropology, 7,* 177-182.

PERKINS, D. N., & BLYTHE, T. (1994). Putting understanding up front. *Educational Leadership, 51 (5),* 4-7.

PERKINS, D. N., GOODRICH, H., TISHMAN, S., & MIRMAN, O. J. (1994). Thinking connections: Learning to think and thinking to learn. Reading, MA: Addision –Wesley.

SODOWSKY, G. R., MING, E. L., & PLAKE, B. S. (1991). Moderating effects of sociocultural variables on acculturation attitudes of Hispanics and Asian Americans. *Journal of Counceling & Development, 70,* 194-203.

TRIANDIS, H. (1994). *Culture and social behavior,* New York: McGraw Hill.

Bibliography in Hebrew

BEN PEREZ COMMITTEE REPORT (2005). "Graduation 2000" – report of The Committee for Review of Graduation Examinations, Jerusalem. The Ministry of Education, Culture and Sports.

BIRNBAUM, M. (1997). *Alternatives in Achievement Evaluation.* Tel Aviv University Press:Ramot,

DAROM, D. (1989). *Climate for Growth.* Tel Aviv: Poalim.

TISHMAN, S., PERKINS, D ., & GAY, A., (1996). The Thinking Classroom. Jerusalem. Branco Weiss Institute and Ministry of Education.

Brief curriculum vitae of Dr. Orly Michael

Dr. Orly Michael, lecture in the school of education in Achva Academic College, and the Head of the pedagogic instructors dept. Specialized in teacher training, pedagogic instruction, multicultural- education and science- education. Also lecture in the school of education in Bar-Ilan University, Israel.