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The Education Game

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The Ecuador Non-Formal Education Project was a joint project of the Ministry of Education in Ecuador and the University of Massachusetts Center for International Education funded under the auspices of the United States Agency for International Development.

TECHNICAL NOTE NO. 14

THE EDUCATION GAME

WILLIAM A. SMITH

Summary:
This note presents a description of a game that is designed to reveal the inequities in many educational systems. The game comes in two versions: as a simulation and as a board game.
1. The Ecuador Project: Discusses the basic goals, philosophy and methodology of a rural nonformal education project.
3. Hacienda: Describes a board game simulating economic and social realities of the Ecuadorian Sierra.
4. Mercado: Describes a card game which provides practice in basic market mathematics.
5. Ashton-Warner Literacy Method: Describes a modified version of Sylvia Ashton-Warner's approach to literacy training used in Ecuadorian villages.
7. Bingo: Describes bingo-like fluency games for words and numerical operations.
8. Math Fluency Games: Describes a variety of simple games which provide practice in basic arithmetic operations.
9. Letter Fluency Games: Describes a variety of simple games which provide practice in basic literacy skills.
10. Tabacundo - Battery Powered Dialogue: Describes uses of tape recorder for feedback and programming in a rural radio school program.
11. The Facilitator Model: Describes the facilitator concept for community development in rural Ecuador.
12. Puppets and the Theatre: Describes the use of theatre, puppets and music as instruments of literacy and consciousness awareness in a rural community.
13. Fotonovella: Describes development and use of photo-literature as an instrument for literacy and consciousness raising.
14. The Education Game: Describes a board game that simulates inequities of many educational systems.
15. The Fun Bus: Describes and NFE project in Massachusetts that used music, puppetry and drama to involve local people in workshops on town issues.
16. Field Training Through Case Studies: Describes the production of actual village case studies as a training method for community development workers in Indonesia.
17. Participatory Communication in Nonformal Education: Discusses use of simple processing techniques for information sharing, formative evaluation and staff communication.
21. Q-Sort as Needs Assessment Technique: Describes how a research techniques can be adapted for needs assessment in nonformal education.
22. The Learning Fund - Income Generation Through NFE: Describes a program which combines education and income generation activities through learning groups.
23. Game of Childhood Diseases: Describes a board game which addresses health problems of young children in the Third World.
24. Road-to-Birth Game: Describes a board game which addresses health concerns of Third World women during the prenatal period.
25. Discussion Starters: Describes how dialogue and discussion can be facilitated in community groups by using simple audio-visual materials.
26. Record Keeping for Small Rural Businesses: Describes how facilitators can help farmers, market sellers and women's groups keep track of income and expenses.
27. Community Newspaper: Describes how to create and publish a community-level newspaper in a participatory fashion.
28. Skills Drills: Describes how to make and use a simple board game for teaching basic math and literacy skills.
Technical Notes 1-14 were produced by staff members of the Ecuador Nonformal Education Project. Each note focuses on a particular issue or technique which has been developed and tested in Ecuador. The notes contain the information available at the time of writing and analytic comments based upon available evaluation data. However, the notes are in no way an evaluation of the project. Their purpose is to share ideas and information about new techniques as they are developed. Project staff want to encourage comments and suggestions from readers who may have had experience with similar techniques in other settings.

The project was financed by USAID and was a joint undertaking of the Ministry of Education in Ecuador and the Center for International Education at the University of Massachusetts. Ideas and materials derived from the ideas were created jointly by staff in Massachusetts and staff in Ecuador. All materials have undergone considerable change in the field as usage in various situations indicated needed modifications. The notes attempt to accurately credit the creators of each technique. In some cases, though, ideas have been modified by a variety of people and precise assignment of credit is difficult. In all cases, various members of the staff have made substantial inputs into the final version of the materials.

After three years of effort the number of people in Ecuador and in the United States who have made substantial contributions to this project is considerable. Rather than trying to enumerate the particular contributions of each, we will only note that this has been a genuine bi-national effort.

Technical Notes from other Center projects will be issued periodically as they are written. A small charge of $1.00 per copy will be made to partially defray the costs of reproduction. Technical Notes 1-13 are available in both English and Spanish and may be obtained by writing to:

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Hills House South
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Amherst, Massachusetts 01003

David R. Evans
Series Editor & Principal Investigator
The Education Game

"But it's not fair......I didn't even get a chance to go to high school." "Why should I fail just because my teacher doesn't like me?" "I didn't have time to help my classmate. I was too busy trying to survive in school myself."

Sound like a meeting of students? No, these are the responses of adult teachers after playing The Education Game, a simulation designed to help professional educators experience what schooling means to students. Even though we have all been to school, it is often difficult to remember what being a primary or high school student really means. The Education Game attempts to recreate, in a short period of time, the structural job and status related effects of formal education on different socio-economic groups. It simplifies and exaggerates those effects, and in so doing it provokes discussion and reflection on the systemic problems facing teachers, administrators, and students everyday.

The Education Game was originally developed as a way of introducing rural farmers in Ecuador (who had very little formal contact with schools) to the schooling experience. As part of the Ecuador Nonformal Education project supported by the Center for International Education at the University of Massachusetts, the game was later expanded for use with Ecuadorian teachers to help stimulate discussion on school-related problems and conflicts they were experiencing daily. The game has since been adapted for use in a variety of cultural settings in both
non-industrial and industrial countries, but its principal focus continues to be the replication of the systemic effects of traditional schooling on access to jobs and status. The game can be played in two different ways: as a board game or a dramatized simulation.

BOARD GAME:

With a relatively small group (20-30), the use of a game board creates a visual interest and suggests the feeling of a giant rutelle game.* The game board is an abstracted vision of the educational system. All players begin at one end of the board and try to reach College Graduation as an ultimate goal. There are various paths which lead toward the goal -- many of which branch off and dead-end at different status level or job careers. In the Ecuador version, for example, the lowest status job was itinerant farming. Other jobs ranged from mechanic, barber, and carpenter to public official, secretary, and office worker. The highest status jobs were in careers associated with college graduation: doctors, lawyers, and engineers. The board is divided into three general levels, Primary Education, Secondary Education, and University Education. Players must complete lower education levels before proceeding to higher ones. Each level has various paths and each path is divided into blocks or steps. Steps have events or happenings written on them, avoiding the necessity of cards as a content device.

The players are divided into four social class groups representing the children of: a) wealthy businessmen; b) upper-middle class entrepreneurs; c) blue-collar workers; and d) rural poor. Participant groups

*See Appendix A for copies of all materials needed for Board Game.
are divided proportionally so as to represent the actual percentage of a
given group in the society being examined. In Ecuador the rural poor
group comprised approximately 40% of the entire group, workers another
30%, middle class some 20%, and wealthy businessmen the remaining 10%.
Each group receives proportionally different resources related to their
social class standing, and is represented on the board by a color and a
cartoon-like drawing to increase visual interest. Each participant
receives a role description outlining his/her background and resources.

Sequentially, the game is divided into different stages. Play
begins with a general explanation of the game and how it will operate.
At this point players should feel that they are children commencing a
long and exciting road toward educational achievement. The game monitor
should ask players if they would like to bet (using real money) on their
potential success in achieving a university education. The monitor
collects the money which the winner or winners will receive at the end
of the game. Next, descriptors are distributed to each player. These
descriptors are all the same for a given social group. One of the roles
for each social group is read aloud so that all players know the back­
ground and resources of each player. Resources are also distributed
according to instructions given on each role descriptor.

The monitor now gives a brief speech telling all the participants
the importance of education and assuring them that each individual has
an equal opportunity to become a college graduate. The speech should be
very short (30-40 seconds) and interrupted by the arrival of a letter
from the Ministry of Education stating that 20% of the rural children
will not be able to attend school because of the government’s lack of
funds. The monitor reads the letter to the group and as a consequence, 20% of the rural poor are not allowed to enter the game. The rural poor can decide among themselves which 20% will not enter.

At the primary level a series of dice are used which represent the social advantages of being wealthy or the disadvantages of being poor. Each group uses a different die, and each die contains a different distribution of success potential. The following chart outlines the distribution of resources and the numbers appearing on the six-sided die used by each group.

<table>
<thead>
<tr>
<th>Social Group</th>
<th>PRIMARY SCHOOL DIE</th>
<th>SECONDARY SCHOOL DIE</th>
<th>RESOURCES MONEY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wealthy Businessman</td>
<td>6,6,6,6,6,6</td>
<td>6,6,6,6,4,5</td>
<td>$20,000</td>
</tr>
<tr>
<td>Upper Middle Class</td>
<td>4,5,6,6,6,6</td>
<td>4,5,3,6,6,6</td>
<td>$2,500</td>
</tr>
<tr>
<td>Worker</td>
<td>3,4,5,6,6,6</td>
<td>1,2,3,4,5,6</td>
<td>$1,500</td>
</tr>
<tr>
<td>Rural Poor</td>
<td>1,2,3,4,5,6</td>
<td>1,2,3,4,5,6</td>
<td>$100</td>
</tr>
</tbody>
</table>

The game continues as players throw the die associated with their social group and move their individual marker the appropriate number of blocks. A roll of six, for example, indicates that the player has successfully completed sixth grade and must wait to see how other players fare before moving into Secondary Education. A player rolling a three would move to the third grade block of his/her social group and follow the instructions printed there.
Using their die, the wealthy businessman class has a significantly larger chance of reaching sixth grade and going on to secondary school than the rural poor group. The rural poor group is not only hampered by the low numbers on each die, but by the events written on the blocks or steps which represent each grade level in primary school. Because the four social groups have four different paths to take toward secondary school, each path is comprised of different school/life events. The game is consciously structured to ensure that only a few rural poor will complete primary school, while all or most of the wealthy will go on to Secondary and Higher Education.

At the secondary level, players must choose which path they wish to follow toward Higher Education. Only one path leads to university training; the others lead to a variety of job-related skill training either in the humanities or in vocational areas. At this level another set of dice is used, and the potential for the lower social class groups to achieve success is increased, but is still less than that of the wealthy social group. Success potential is again expressed in the game through the distribution of numbers on the new set of dice. The previous chart shows in the SECONDARY SCHOOL DIE column the distribution of numbers for each social class.

As players drop out of the school system and land on either jobs or unemployment they should leave their markers on the board. The distribution of these markers is an important discussion point for the processing period that should follow the game.
At the university level there are few players—perhaps only two or three from a group of thirty. At this point the same die is used for all players. The player arriving first at "University Graduation" is considered a doctor; the second is a lawyer; and those arriving third or later are engineers.

**DRAMATIZED SIMULATION:**

The Education Game may also be run as a dramatized simulation avoiding the use of a game board and utilizing participant groups of up to 100. Played this way the game uses role descriptors and a monitor instead of a game board with paths.*

Play begins when the game monitor collects five cents from every player. This money is not refundable. S/he explains that this money pays for most of the primary school costs. The game monitor also explains that the objective of the game is to reach college graduation. Everyone has an equal chance. (This point should be stressed.) Success in the game will depend upon how good you are and how hard you try. S/he explains that everyone has the potential to win.

**Win Criterion** - The monitor goes on to explain that winning is based on the number of points a player earns while playing the game. Points are accumulated in two ways:

1) By accurately guessing in advance how far s/he will get in the educational system, a player will win a number of points equal to the level s/he has reached. If a player guessed that s/he would only graduate

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*See Appendix B for sample materials needed for Dramatized Simulation.*
from the sixth grade and eventually had to leave school at that level, that player would receive 6 points. If the player progressed beyond the estimated level, s/he would not earn those points.

2. Players who succeed in graduating from college receive 16 points. They also have the opportunity to obtain special bonus points by becoming a doctor (10 pts.), a lawyer (5 pts.), or an engineer (3 pts.).

Players must make a guess as to how far they think they will go in the school system and record it on their Instruction Sheet. Do not answer any questions which will explain what is to happen during game play. It is all right if players have to make a decision based on very little real information.

Assignment of Roles - The roles of the players in this game essentially determine their success. It is almost certain that the people with "A" cards will win. The players must not know this before the game begins. There are several ways of distributing the roles including:

a) selling them to the highest bidder and explaining that "A's" have a slight advantage over "B's", and so on; (This may have the advantage of being most like reality.)

b) handing roles out randomly;

c) setting a fixed price for each role and allowing people to volunteer to pay for them; ("A's" should be more expensive than "B's", etc.)

The monitor now sets the scene. Everyone is ready for their first day in school. All have paid their dues and are on their way; but a letter from the Ministry of Education arrives stating that enrollments in
rural schools must be reduced by 20% because of a lack of funds. The letter from the Minister is read to the entire group. The "D's" are asked to reduce their number of students by 20%. Those who are not able to continue in school should go to a part of the room marked DROP-OUTS. (This is an attempt to reflect the lack of available space for children in many Third World school systems.) The monitor then explains that s/he is very sorry that this had to happen, but at least the remaining players have an equal educational opportunity.

Textbooks and Tests - As in every school, the first job is to distribute the textbooks. These come in three "editions". The DELUXE textbooks are of high quality and are completely reliable. The REGULAR textbooks contain a few errors, and the BUDGET textbooks have even more errors. The textbooks are distributed among the students in the following manner:

<table>
<thead>
<tr>
<th>Group</th>
<th>DELUXE</th>
<th>REGULAR</th>
<th>BUDGET</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>100%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>60%</td>
<td>40%</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>10%</td>
<td>60%</td>
<td>30%</td>
</tr>
<tr>
<td>D</td>
<td>NONE AVAILABLE</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Unfortunately there are no textbooks available for the "D" people due to a lack of funds, but they are allowed to talk to each other in order to prepare for the examination all of the students have to take.

The monitor gives everyone three minutes to study their textbooks. The "A", "B", and "C's" should not talk to the other players. They must work alone. The monitor then collects the books and distributes the tests.
The tests are the same for everyone. The uneven quality and distribution of the textbooks ensures that only a limited number of people will get all of the answers correct. The attempt here is to reflect the influence that family background and different quality schools have on achievement levels within standardized tests.

The monitor warns the students about the evils of cheating and stresses that they should look only at their own paper and keep quiet during the test period. They are then given three minutes to answer the test. Afterwards they exchange papers for correcting, and the monitor gives the answers and explains how the papers are graded. The number of right answers determines the grade level reached. For example: if three answers are correct, the player graduates from the third grade and then drops out. If all the answers are correct, the player not only graduates from the sixth grade but goes to high school. Anyone who even misses one answer goes to the Drop-out area. This should leave very few players and reflects the high drop-out rates in developing countries after elementary school. At this point the monitor should give a very short speech extolling the virtues of those who have passed - who have tried hard and made it - while criticizing those who haven't worked and, consequently, have flunked out.

Counselling - The next phase is individual counselling. The monitor takes a minute with each player and counsels her/him as to whether s/he should go to college, to vocational school, or to a teacher training college. The monitor should counsel the "A's" to go on to college, stressing their strong academic background and family as important factors in promoting their success in college. The "B's" should be counselled
into vocational school if they are boys and teacher training if they are girls. The point should be made that they are free to make their own decisions; but the monitor should suggest that they take her/his advice. The monitor should then write that advice on the player's descriptor sheet.

After receiving the monitor's opinion, the player's should make their own decisions on which option they will follow by marking their descriptor sheets. The monitor then reviews each decision. "A's" are free to do as they like. If they want to go to college it is acceptable. Only half of those who choose to may go on to college. The monitor explains that there are simply not enough openings. If any "C's" make it through elementary school they cannot get into college. They must go to vocational or teacher training schools. Any girl applying to vocational school will not be accepted. Only one boy can be allowed into teacher training college.

Those who do not get into a college program roll the secondary school die to see how far they go in high school. (This die has numbers from 7-12.) The number they roll on the die corresponds to the final year they complete. If they roll an "11" they complete the 11th grade, etc. They then drop out of the game. The college-bound people draw a high school graduation question out of the hat; if they are able to answer it, they graduate. If they are unable to answer it, they roll the die and see what year they drop out of high school.
University Graduation - At this point very few players are left in the game. The problem now is to determine who will become doctors, lawyers, engineers. This is done by using the RING TOSS game or any other simple game that is available. Each player is given six rings. If he gets four rings in a waste basket from 10 feet away he becomes a doctor; if three rings, a lawyer; if two rings, an engineer; and if one ring, an unemployed college graduate. If he gets no rings in, he flunks out. Doctors get 10 extra points, lawyers get 5 extra points, and engineers get 3 extra points. Anyone graduating from college receives a total of 16 points plus whatever points they made in the ring toss.

It should be obvious to the reader that the Education Game is loaded. The outcome is largely pre-determined by the structure, distribution of resources, and rules of the game. These factors are deliberately constructed to reflect real-life events, prejudices, and consequences. Players have relatively little effect on the outcome, rather they are the victims of a structure which they appear to understand but which controls rather than responds to their needs.

The construction of both the Game Board and the dramatized simulation requires great care and is time consuming. Game play, however, appears simple to players who are unaware of the complexities involved in game design. Playing time is relatively short, ranging from 30 to 90 minutes. But care must be taken in preparing materials, distributing social class groups, and ensuring that the resulting proportions of drop-outs are related to real-life results in the educational system being examined.
The game structure should reflect real-life factors, but they need not be precise. During discussion it is often true that the game itself is criticized by players as not presenting a totally accurate picture of the education system. This can be an important point of discussion focusing on divergent beliefs in the groups about the value and consequences of education. Game leaders should not defend the prejudices expressed in the game but use the game to explore what players believe the prejudices are in real life. At the same time the game must be close enough to reality so as not to present a vision of education with which players cannot identify at all. In American education, for example, much larger numbers of students would have to complete primary school. Much more emphasis would be given to secondary, university, and post-university education.

**Follow-up Discussion** - Once game play has ended, players will need a few minutes to express their frustrations, recount funny events, and generally cool down. After this cooling-off period, the group monitor should begin a discussion of the game and its relation to real life. The following topics are suggested for discussion:

a) How were people selected out of the system? Lack of space, lack of ability, unequal advantage, wrong decision as to what career they should follow, luck, their original role, etc?

b) At what level did the biggest drop-out factor occur? Why?

c) Is it true that everyone had an equal opportunity at educational achievement?

d) What are the restraints operating on the individuals who control or administer an educational system?
e) What are the assumptions that this educational system is based upon? That education is for the few? That only the hardy will survive?

f) How does this game parallel real life? Do any of these things happen in our own schools?

g) Why do such things take place? Who is to blame?

h) What can we do to make changes in these events?

The group monitor should carefully observe the group noting interesting events which took place during game play. Using these events and the questions suggested above, discussion should focus on what the game means in terms of real-life schooling. There is no need to become defensive about game elements. Players' criticism of the game may be one way of avoiding difficult topics, or they may be quite right in pointing out that a given element is exaggerated in the game. Discussion should move away from the game and more towards real-life schooling experience. Players should begin to talk about their own schooling experience, stressing both positive and negative memories. Typically, a series of real-life problems will be identified by the group. These problems should be listed and perhaps rank-ordered. The problems ranked highest can then be addressed in terms of alternative solutions. At this stage players should become very concrete and realistic. They should be talking about themselves and their own problems and what they as individuals or as a group can do to solve those problems. In this way the game is used as a discussion starter: a provocative and fun way of allowing people to express and explore their own feelings, identify common problems and seek solutions to those problems together.
APPLYING THE GAME IN ECUADOR:

In Ecuador the Education Game was used with groups of rural farmers who had limited experience with schools. Many had never attended school, while others had gone for only one or two years. For some their only contact with the school was through their children. Many farmers did have strong perceptual sets about schooling however. Schools were considered to be good. They were the way out of poverty for their children. They were a route to the city and paying jobs. Schools often took on an almost magical characteristic representing the solution, or at least the only available solution, to problems of poverty and oppression. Schools were the way to become like the white man, to be educated, successful, and urban.

It was interesting to note that these beliefs were held most strongly by those farmers least exposed to schools. Farmers with two or three years of schooling were much less positive about the ability of schools to help them. They would often describe schools where they had been poorly treated, forced to do work which they did not understand, and learn things which had no value to them. Parents would often recite tales of physical abuse their children had received and recount examples of how arrogant teachers had demanded contributions from them for the school's or for the teacher's own sustenance. Because teachers in rural areas were rarely assigned to a given village for more than one or two school years, communities seldom identified the teacher as anything more than a transient: unhappy living with them and unable to understand either their customs or their language.
It was because of this contrast of positive and negative images of schools that the decision was made to create a learning game which would help communities talk about schools, what they meant to the communities, and how they could be improved. Through a series of unstructured interviews with rural farmers, local concepts about schools were collected and structured into the board game format. The events noted, particularly at the primary school level of the game, were all actual events which had been related to the game designer by rural farmers or their children. The game does not attempt to present a balanced picture of education, but rather to simulate rural people's beliefs about schooling: beliefs which include its prejudicial and demeaning treatment of the poor, as well as beliefs that schooling was the best access to social status and economic security.

Several versions of the board game were produced and tested with rural farmers. The final format was chosen less on the basis of its proximity to reality and more on its capacity to generate critical discussion of schooling among farmer groups. The game proved to be one way of releasing personal and emotional experiences and sharing those experiences with the community group. It helped some farmers demystify teachers—a group they had previously held in awe and fear.

The game, like most of the structured experiences used in the Ecuador Nonformal Education project, was a catalyst provoking critical analysis of some aspect of rural life. Unlike the Hacienda Game*, the Education Game focused on a single institution. For this reason it was used at later stages in a farmer group's development. Use of the game was determined by

*The Hacienda Game (Tech Note #3) is a simulation game that attempts to replicate certain important aspects of rural life in the sierra region of Ecuador.
expressed community interest in schools and schooling. The game was not used in all communities because: 1) it was developed late in the project and; 2) it was not appropriate to all communities' interest. In this sense it is an example of second or third stage nonformal material: designed not to generate "themes" as Freire says, but rather to explore in depth a given "theme".

The Education Board Game was also used with rural teachers in Ecuador. It is the author's belief that in this setting the game was a much more powerful educational tool. Teachers lived the schooling experience each day. They were both victim and victimizer. To understand how the game worked in this context it is necessary to understand something of who those teachers were.

For the most part they were young men and women from urban, working class families. Many had spent their childhood in urban poverty with parents who had not completed the third or fourth grade. They were often the first in their families to have a Normal School education. Normal Schools are poor in Ecuador: understaffed, antiquated bastions of tradition attractive only as a last resort to young people desperately searching for a job. For these young people, their jobs as teachers represented a way up and out. To be sent to the rural areas where they could not speak local languages, where few of the urban reinforcements they had grown accustomed to were available, and where they were confronted again with their own poverty-ridden origins was nothing less than exile for them. Their one goal was to serve their time and get out of the rural school.
This mental set, combined with their belief in a mission, created serious internal conflicts within these young people. In addition, the very authoritarian and arbitrary decision-making context in which they worked and the miserable wages they received created a situation ripe for critical analysis. It was, indeed, this group of individuals who were most stimulated and challenged by the Education Game. They were confronted with the conflict between their missionary purpose and the oppressive and arrogant behaviors they demonstrated toward their rural students. For many teachers this confrontation was a difficult process. They felt manipulated and spent time attacking the game as being unfair and untrue. But there were some teachers interested in exploring the conflict between their beliefs and their actions. These individuals used the game as a way of discussing feelings they had been unable to share previously. For them the game was powerful material--more appropriate for them than for farmers. Thus, teachers who felt victimized by their own exclusion from university training came to understand how they victimized rural farmers through their arrogance and insensitivity.

CONCLUSION:

The Education Game, either in its board or dramatized simulation format, is a complex game to construct. It requires an in-depth knowledge of the educational system being examined and great attention to detail in its construction. The game is "rigged"--structured in such a way that the outcome simulates the real-life outcomes of education in a given social setting. It is useful as a tool to promote critical discussion of the effects of schooling on the distribution of social status and on the access to jobs.
It looks at education, not as a component or element in a larger system, but as a system in itself. It stresses the interrelatedness of social status and educational success.

The game would have to be adapted for use in different social settings, but can be used with both large and small groups of participants. The most crucial aspect of the game is the follow-up discussion. This discussion should begin with an analysis of the game, move toward an exploration of participants' beliefs about their own educational experience, identify problems with that educational experience, and generate alternative solutions to those problems. In this way the Education Game can assist groups interested in the critical analysis of formal education and its consequences.
APPENDIX A
MATERIALS NEEDED TO PLAY THE
EDUCATION GAME

BOARD GAME VERSION

1. Four Role Descriptors
2. Letter from Minister of Education
3. Four Primary School Dice
   (as described on page 4)
4. Four Secondary School Dice
   (as described on page 4)
5. One die with numbers from 1-6
   used when players land on
   WORK (Trabajo)
6. One die with numbers 1-6 used
   for College
7. Game Board
8. Colored markers for each player.
   Four colors should be used, one
   for each social group. Within
   the social group, colors can be
   numbered to have an individual marker
   for each player.

DRAMATIZED SIMULATION VERSION

1. Four Role Descriptors
2. Letter from Minister of Education
3. Three Textbooks
4. Test for each player
5. One die with numbers 7-12
   used for Secondary school
6. Six colored rings, wastebasket,
   used at college level
ROLE DESCRIPTOR

A. You are the son/daughter of a very wealthy businessman. You live in the capital city and have three older brothers. All of your brothers are excellent students and are interested in helping you as you progress through school. Your parents have an excellent library and you attend films and listen to the radio regularly. You are very excited about going to school and you expect to do very well.

Game Board Resources: S/20,000
Grade level you think you will reach: ________________________

HIGH SCHOOL EXPERIENCE

Counselor's Advice: ______________________________________
Your decision: ___________________________ College Preparatory
_________________________ Vocational Training School
_________________________ Teacher's Training College

SCORING SYSTEM

The number of points you earned by correctly estimating the year you would complete in school. + The number of points you earned by becoming: TOTAL SCORE

Doctor - - - 26
Lawyer - - - 21
Engineer - - - 19
College Grad 16

Regardless of whether you guessed right or not.
ROLE DESCRIPTOR

B. You are the son/daughter of a middle class family who lives in a large city, although not the national capital. You are the first member of your family to go to school. Everyone is very proud of you and hopes that you will do very well. Your father subscribes to a few magazines, but you do not have many books in your home. You listen to the radio frequently, but only seldom go to films.

Game Board Resources: S/2,500
Grade level you think you will reach: ____________________________

HIGH SCHOOL EXPERIENCE

Counselor's Advice: ____________________________

Your decision: ____________________________ College Preparatory
______________________________ Vocational Training
______________________________ Teacher's Training College

SCORING SYSTEM

The number of points you earned by correctly estimating the year you would complete in school. + The number of points you earned by becoming: TOTAL SCORE

Doctor - - - 26
Lawyer - - - 21
Engineer - - 19
College Grad 16

Regardless of whether you guessed right or not.
ROLE DESCRIPTOR

C. You are the son/daughter of a small businessman in one of the villages outside a large city. No one in your family has even been to school. Your mother is unable to read and write, but she thinks that your going to school is very important. You have no reading materials in your house other than the newspaper which your father reads. Your two older brothers are manual laborers. You listen to the radio when you are not helping your mother with the chores. You have only been to one movie in your life.

Game Board Resources: S/1500
Grade level you think you will reach: ____________________________

HIGH SCHOOL EXPERIENCE

Counselor's Advice: ____________________________

Your decision: ____________________________ College Preparatory
_________________________________________ Vocational Training School
__________________________________________ Teacher's Training College

SCORING SYSTEM

\[
\text{TOTAL SCORE} = \text{The number of points you earned by correctly estimating the year you would complete in school.} + \text{The number of points you earned by becoming:}\]

Doctor: - - - 26
Lawyer: - - - 21
Engineer: - - 19
College Grad: 16

Regardless of whether you guessed right or not.
ROLE DESCRIPTOR

D. You are the son/daughter of a poor family that lives six hours by bus from the nearest large town. Both your father and mother are illiterate. No one in your family has ever been to school. Your father is a farmer and your mother spends much of her time selling the family goods in the market. You are responsible for bringing up your younger brother and sisters - three of them - while she works. Your father does not know much about school, but your mother thinks it is probably a good idea.

Game Board Resources: S/100
Grade level you think you will reach: _______________________

HIGH SCHOOL EXPERIENCE

Counselor's Advice: _______________________________________

Your decision: ___________________________ College Preparatory
_______________________________________ Vocational Training School
_______________________________________ Teacher's Training College

SCORING SYSTEM

________________________________________________________________________

The number of points you earned by correctly estimating the year you would complete in school. + The number of points you earned by becoming: = TOTAL SCORE

Doctor - - - 26
Lawyer - - - 21
Engineer - - 19
College Grad 16

Regardless of whether you guessed right or not.
The Deluxe Textbook
Study this information carefully as you will be tested on it in a few minutes.
1. A "Gas head" is a person who had a process.
2. If you throw the dice and "7" is showing on the top, the number that is showing down is always a seven.
3. A handkerchief head is an Uncle Tom.
4. G. P. stands for Gregory Parker.
5. If a brother has a short he has a car.
6. "I ain't got no dust" means "I have no money."
7. "The brother has a box" means "he has a stereo."

The Regular Textbook
Study this information carefully as you will be tested on it in a few minutes.
1. A "Gas head" is a person who had a process.
2. If you throw the dice and "7" is showing on the top, the number that is showing down is always a seven.
3. A handkerchief head is a porter.
4. G. P. stands for George Peach.
5. If a brother has a short he has a car.
6. "I ain't got no dust" means "I have no money."
7. "The brother has a box" means he has a stereo.

The Budget Textbook
Study this information carefully as you will be tested on it in a few minutes.
1. A "Gas head" is a person who had a process.
2. If you throw the dice and "7" is showing on the top, the number that is showing down is always a seven.
3. A handkerchief head is a porter.
4. G. P. stands for George Peach.
5. If a brother has a short he has a whore.
6. "I ain't got no dust" means "I have no money."
7. "The brother has a box" means he has a stereo.
1. A "Gas head" is a person who had a
   a) fast moving car       b) strand of lace       c) process
   d) habit of stealing     e) long jail record for arson

2. If you throw the dice and "7" is showing on the top, what is facing down?
   a) seven                  b) snake-eyes              c) boxcar
   d) Little Jesus          e) eleven

3. A handkerchief head is a
   a) cool cat              b) porter                  c) an Uncle Tom
   d) a hood                e) a preacher

4. G.P. stands for
   a) George Peach         b) Grand Pa                c) Grand Prix
   d) general principle    e) Gregory Parker

5. If a brother has a short he has
   a) a drink               b) a car                   c) no lights
   d) stolen clothes       e) whore

6. I ain't got no dust means I have no
   a) money                 b) women                   c) clothes
   d) drugs                 e) wine

7. The brother has a box means he has
   a) a color T.V.          b) has a stereo            c) a radio
   d) a camera              4) has a habit
My Fellow Countrymen:

As you all know, I just recently assumed the position of Minister of Education. A massive foreign assistance loan that was being requested by my predecessor has just been denied us. It seems that certain administrative mistakes were made in applying for the loan and we no longer meet the guidelines established by the United States Agency for International Development. This will mean that all of us will have to work much harder and make many more sacrifices in our great struggle for national development, freedom for all, and equal educational opportunities. That struggle will begin now for many of you. Without the loan we are able to open 20% fewer classrooms in the rural areas of our country this year. That means that 20% of our rural children will go without education. For the Ministry this is a national disaster, but one which we are powerless to affect.

My sincerest regrets go out to all the children and parents in our rural areas who are consequently excluded from future educational opportunities. And let me simply say that this situation will be corrected as soon as possible.

Sincerely,

Alfonso Reyes
Minister of Education

AR:jb
APPENDIX B

PERCENTAGE DISTRIBUTION OF PLAYERS AT DIFFERENT LEVELS OF THE DRAMATIZED VERSION OF THE EDUCATION GAME
| GROUP | % OF TOTAL GROUP | EXAMPLE CLASS OF 30 | % OF LETTER GROUP THAT ENTERS SCHOOL | NUMBER OF PEOPLE ENTERING SCHOOL | % OF LETTER GROUP THAT RECEIVE DELUXE, REGULAR AND BUDGET TEXTBOOKS | 100% receive Deluxe Textbook | 100% of boys to vocational school | 100% of girls to teacher training | % ACCEPTABLE TO CHOSEN SCHOOL | 
|-------|-----------------|--------------------|-------------------------------------|-------------------------------|-----------------------------------------------------------------|-----------------------------|---------------------------------|---------------------------------|---------------------------------|-----------------------------|
| A     | 5%              | 2                  | 100%                               | 2                             | 100% receive Deluxe Textbook                                    | 2                           | 100% to go to college           | 100% to go to college           |                                 |                              |
| B     | 15%             | 5                  | 100%                               | 5                             | 60% receive Deluxe Textbook A                                   | 3                           | 100% of boys to vocational school | 10% to go to college            | 100% go to vocational school    | 100% go to teacher training   |
|       |                 |                    | 40% receive Regular Textbook B     |                               | 100% of girls to teacher training                               | 2                           |                                 |                                 |                                 |roperty training               |
| C     | 20%             | 6                  | 100%                               | 6                             | 10% receive Deluxe Textbook                                     | 1                           | 100% of boys to vocational school | 0% to go to college             | 100% go to vocational school    | 100% to teacher training       |
|       |                 |                    | 60% receive Regular Textbook       |                               | 100% of girls to teacher training                               | 3                           |                                 |                                 |                                 |                              |
|       |                 |                    | 30% receive Budget Textbook        |                               | 100% of girls to teacher training                               | 2                           |                                 |                                 |                                 |                              |
| D     | 60%             | 17                 | 80%                                | 13                            | 0% receive Textbooks A, B or C                                  |                             |                                 |                                 |                                 |                              |
CIE PHILOSOPHY AND APPROACH

The Center for International Education (CIE) is a training, research and service program within the School of Education at the University of Massachusetts. Formed in 1968, CIE offers graduate level professional training and research opportunities in the areas of international development education, nonformal education and global education.

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