Helwan University project
Developing Primary school Pupils' Abilities and Skills at
Some Egyptian Underprivileged Areas (slums)
(Field Study)

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Abstract

Through directing concerted efforts and educational services of seven Faculties of Helwan University towards socially underprivileged pupils in slum areas (EL-Marg area in big Cairo) this research project had two main aims: firstly, modifying a set of arbitrary behaviors of those pupils, in a trial to develop some behavior skills associated with positive social values (character building); Secondly, developing their loyalty values and attitude towards studying. This was done by using various educational activities through all school subjects as well as involving pupils in practicing different activities in sports, music, art, family economics, and social work that support and sharpen their skills as well as other learning outcomes and build their characters in an integrated and civilized manner. This was within the frame of the "100 Schools National Development Project" under the auspices of Egypt's First Lady/ Suzanne Mubarak.

The seven faculties presented an integrated educational program based on a variety of learning and instructional activities that are suitable for the pupils' age group (6:12 years old). This field study of the project was implemented in one primary school in El-Marg educational zone over the full academic year (2009/2010). The project made use of pre-diagnostic, intervene and post measurement tests. Data was collected through four main tools: attitude towards studying measure, loyalty measure, behavior problems measure, and physical Ability test as both pre- and post-intervention measurement tools. Collected data is illustrated through tables and graphs throughout the paper followed by narrative analysis.

Results indicated that there were significant modifications in the pupils' behaviors, as they became able to behave in a well civilized manner with their colleagues, teachers and other adults in the school also they became more motivated and engaged in the learning process. Moreover, results assured that incorporating integrated learning activities into daily school schedule improved pupils' self esteem, loyalty, and positive attitude towards school. The project team recommends continuation of this research project and the dissemination of its aims in many schools of different Egyptian governorates through the Egyptian universities to serve pupils living in slums.

Introduction and background of the problem:

Education leads to dramatic improvements in the quality of life, promoting equity and enhancing opportunities to participate in society. Musinguizi (2009) indicated that education of underprivileged deprived
children living in slums continues to remain a challenge because they are constrained by poor feeding, accommodation, poverty, hunger, orphaned early in life, poor drainage and sanitation, diseases, inadequate health services, congestion, petty trade, violence, sexual abuse, slum area business, un-conducive learning environment and lack of enough sleep, as the research findings say. Moreover, lack of a friendly learning environment both at home and school has largely forced urban slum primary school-going children out of school.

The link between education and poverty reduction is clear. In Egypt, the strongest correlate of poverty is lack of education and the greatest barrier to education is poverty. Poverty is most severe for those who are unable to read and perform basic mathematical operations. Furthermore, education is recognized by Egyptian government as a basic human right, one that has significant impact on the individual and the community, and thus it has committed to the 'Education for All, and Millennium Development Goals'. Therefore, offered services and grants from different society firms and organizations are strongly recommended in supporting and developing the educational system especially in slum areas.

Public schooling in Egypt has come under heavy fire as graduating students do not possess the behaviors, values and skills needed in today’s competitive market nor the discipline of quality education. This is especially the case for the pupils of the Egyptian underprivileged areas (slums), which are becoming rapidly impoverished. In these areas school pupils, who are supposed to be the hope of Egypt in its advancement in keeping pace with civilization and progress, suffer from low loyalty as well as educational levels, negative arbitrary behaviors (i.e. stealing, lie, violence, cheating), lack of basic positive social behaviors and negative attitude towards school and studying in general. Consequently, education at these areas has been gaining interest and support by the Egyptian government.

Canadian international development Agency (CIDA) (2009) assured that Egypt, although on a path to economic development and having reached the lower middle-income status, is lagging behind in human development at slums, in particular with high illiteracy rates (amongst the 10 worst countries in the world), low quality of education, low levels of loyalty and negative arbitrary behaviors among school pupils, which are holding Egypt’s development back.
In fact, Egypt embarked on a path to education reform in the early 1990s and made important achievements, in particular towards universal primary enrolment and reduction of the gender gap. In the last decade or so, Egypt has focused increasingly on quality issues, as well as reforming its system through decentralization and restructuring exercise, as well as capacity-building. Egypt published its National Strategic Plan for Pre-University Education Reform 2007-2011. Yet, the public education system continues to produce illiterate or poorly-educated youth. Children and youth disadvantaged by location (in particular rural Upper Egypt and urban slums), socio-economic status or gender, continue to struggle in an education system that no longer serves as an instrument of social mobility. Therefore, there is a need for reform in non-formal education and educational activities also, in order to equip this young cohort of disadvantaged pupils, living in slums, with the necessary tools (basic literacy, livelihood skills, loyalty values and positive social behaviors) to improve their lives and their roles as active and loyal Egyptian citizens.

Government and World Bank estimates of poverty levels among Egypt’s urban (slums) population are misleading and “grossly underestimated”, said Sarah Sabry of London University’s School of Oriental and African Studies (SOAS) “The slums poor are much more prevalent than commonly assumed. The populations of informal areas are increasing, both in absolute numbers and relative to the rest of the city’s [Cairo] population,” she stated, drawing on research for her study published in May/2009. According to estimates by the UN Human Settlements Program (UN- Habitat), some 40 million, or 50 percent, of Egypt’s population of 80 million were urban (slum) dwellers in 2010. It projects that by 2025, the country would have an urbanization rate of 59 percent (57 million people out of a population of 96 million).

While some initiatives have tried to develop the skills and abilities of Egyptian school pupils, none of those have been concerned with educating disadvantaged slum pupils, modifying their arbitrary behaviors, developing their loyalty values and improving their attitudes towards studying in a trail to prepare them to become well qualified citizens able to meet the demands of a civilized community and the labor market. Also, while a few initiatives have implemented recreational projects in these areas, those have been mostly of short duration and limited scope. The present research project instead focused on implementing an educational program (based on recreational activities) through different school subjects and enrichment activities at-school.
Actually, Helwan University is directing its attention to the problems and issues of society not hesitate to provide its expertise, capabilities and potential to resolve some of these problems. The problem of slum pupils' lack of loyalty values, negative attitude towards studying and arbitrary behavior modification is among these problems as some of the critical problems facing the Egyptian society in general, which requires the effort of various institutions and firms to eliminate them, as they really hinder the society in creating its way of growth, progress and prosperity.

Moreover, in the field of education at slums in Egypt official statistics assured that there are many pupils stumbling in the course of the study for various reasons, among them negative attitudes towards school, lack of the values of loyalty towards self, family and society, and, if they do not receive the appropriate help in overcoming these educational difficulties, the way is open to increasing the number of illiterate dropouts from education. To overcome this serious problem, Helwan university, as one of the educational centers in the society, recommend that those pupils are in critical need to a well designed and attractive various educational activities as well as artistic, sporting, social and home economic activities that are integrated in a scientific manner with the key objectives of the educational aims at schools that are directed towards core goals: help pupils in developing their values of loyalty, positive attitude towards studying, and modifying their arbitrary behaviors.

Helwan University implemented, through its present suggested research project, an experimental program that included training its student teachers, participating in the project, on recent teaching/learning activities and behavior modification techniques in order to help slums pupils reach the intended aims of the research project. To do so, concerted efforts of seven faculties of Helwan University, under the auspices of Prof. Dr. Mahmoud El-Tayeb, took their decision to start this project to pilot innovative approaches and activities to serve this high-risk group of pupils. The seven faculties are:

- Faculty of Education.
- Faculty of social work.
- Faculty of Home Economics.
- Faculty of Music Education.
- Faculty of Art Education.
- Faculty of Physical Education (Girls)
- Faculty of Physical Education (Boys)

The seven faculties put a plan to design an integrated educational program based on a variety of learning and instructional activities that are suitable for the pupils age group (6:12 years old) also these attractive
activities were built in the light of recent educational theories that stress active learning and multiple intelligences and learning styles of the learners.

Values and character education development usually occurs over a number of years and within a number of environments. Since family members are the first individuals with whom one comes into contact the influence of the family continues to be extremely important to a child's character and values development. This fact is particularly appropriate in the preschools and early school years. As students progress through public schools, it is important that their education provide instructional opportunities, explicit and implicit that help them develop their beliefs about what is right and good. For slums pupils the problem is more critical since they do not have the proper educated families that put the bases for their characters, they are left to the street to be their first influence in their values development. Those pupils come to school with a completely negative value system and ill-treated character that is full of arbitrary behaviors (stealing, lie, vulgar language, cheating). Also, they exhibit extreme levels of impatience, self control problems, time inconsistency, and violence. Accordingly they are in a bad need for an organized and concentrated effort in helping them build their character in a well civilized manner, modify their behavior, develop loyalty values, and attitude towards school and learning in general.

Behavior is the way a person reacts to a particular stimulus and varies from individual to individual. Behavior modification technique is the way you improve the behavior of a person, through use of some positive and negative reinforcements and punishments. It is the process of altering a person’s reaction to stimuli. Behavior modification is much used in clinical and educational psychology, particularly in case of people with learning difficulties. In the day to day life, it is mostly used in the classroom scenario, where the teachers use such techniques to reform the behavior of a child. Read on to know more about techniques used for modifying behavior.

Stages of Behavior Modification:
Behavior modification is based on two types of theories. One involves antecedents i.e. events which occur before a particular behavior is demonstrated and the other is observable behavior i.e. those events that occur after a particular behavior has been occurred. A behavior modification technique is applicable only after a series of changes. An inappropriate behavior is observed, identified, targeted, and stopped.
Meanwhile, a new, appropriate behavior must be identified, developed, strengthened, and maintained.

Reinforcements and Punishment:
Positive reinforcements are the ways in which you encourage the desired behavior. It increases the future frequency of the desired behavior. Patting the back, passing a smile or sometimes even giving a chocolate when a person behaves properly is called positive reinforcement. Negative reinforcement, on the other hand, increases the likelihood that a particular negative behavior would not happen in the future. It is often confused with punishment. While punishment is negative, negative reinforcement is positive. It is a positive way of reducing a particular behavior. (http://lifestyle.iloveindia.com/lounge/behavior-modification-techniques-2949.html)

Behavior Modification Techniques

- Classroom Monitoring: Effective teaching practices, frequent monitoring, strict rules and regulations, social appraisal, etc
- Pro-social Behavior: Positive and negative reinforcements, modeling of pro-social behavior, verbal instruction, role playing, dramatization, story telling etc
- Moral Education: Moral Science classes on real-life situations, imaginary situations and literature. Let students play different roles as a teacher, principal, parents, etc and participate in school administration.
- Social Problem Solving (SPS): Direct teaching of SPS skills (e.g. alternative thinking, means-ends thinking), dialoguing, self-instruction training, etc
- Effective Communication Models: Values explanation activities, active listening, importance of communication and interpersonal skills, training for students and teachers

Actually the present research made use of these techniques, as classroom daily activities, in an integrated manner through all school subjects concentrating on achieving its two main aims.

University student-teachers, from the seven faculties, were responsible for applying the suggested activities of the present study during their teaching practice training at school. Teaching practice is considered as an integral part of teacher education. An introduction to the realities of
the situation is an essential part of effective professional training. This process also allows the student teacher an opportunity to determine whether the appropriate choice has been made. The aims of the teaching practice experience are to provide opportunities for student teachers to integrate theory and practice and work collaboratively with and learn from the teachers.

Interns observe subject teachers at work so as to learn about teachers' skills, strategies and classroom achievements. They also evaluate their own teaching experiences through conferencing with teachers and lecturers and, through self-reflection, implement a variety of approaches, strategies and skills with a view to bring about meaningful learning. In this way interns gain experience in managing and evaluating class work; in maintaining discipline and good order in the classroom; find their own teaching style and personality and become acquainted with school organization and administration.

The present research Program offers those student teachers hands-on experience with civic action, an enhanced awareness of the meaning of citizenship and the opportunity to find solutions, provide comfort and guidance, and assume a leadership role in the community through helping primary pupils living in slums overcome their problems in studying as well as help in modifying their negative behaviors and developing their loyalty values towards self, family, school, and the country.

**Statement of the problem:**

According to what has been mentioned above the research problem of the present study could be summarized in the following statement:

There is a remarkable percentage of arbitrary behaviors (negative), lack of loyalty values, and negative attitudes towards studying among slums primary school pupils at El Marg educational zone; mainly at Gamal Abdel-Naser primary school, that leads to their school dropout and impact passively on their characters. Therefore, the present research project attempts to investigate the effect of suggested various specialized educational activities through all school subjects as well as involving pupils in practicing different activities in sports, music, art, family economics, and social work that develop their loyalty values, modify their arbitrary behaviors, improve their attitude towards studying, and build their characters in an integrated and civilized manner.

**Research Questions**

The problem of the present study can be stated in the following major question:
What is the effect of using a group of suggested specialized educational activities through all school subjects as well as practicing different activities in sports, music, art, family economics, and social work on modifying arbitrary behaviors of primary school pupils', living in slums, and developing their attitudes towards studying and loyalty values towards self, family, school, and the country?

This major question can be translated into the following sub questions:-
1. What are the arbitrary behaviors of pupils living in Egyptian slums? "What does literature say about education at Egyptian slums?"
2. What is the design of the educational and specialized activities that help in modifying these behaviors and develop pupils' attitude towards study and loyalty values?
3. What is the effect of the suggested design in developing the primary pupils' (the experimental group) attitude towards study?
4. What is the effect of the suggested design in developing loyalty values among the experimental group pupils?
5. What is the effect of the suggested design on the experimental group behavior modification?

Hypotheses:
- The study hypotheses are as follows:
A) Hypotheses comparing the experimental and control group mean scores on the post test:
1. There is a statistically significant difference between the experimental and the control group pupils' mean scores on the post administration of the loyalty measure, according to the whole score, in favor of the experimental group.
2. There is a statistically significant difference between the experimental and the control group pupils' mean scores on the post administration of the loyalty measure, according to the analytical scoring on the four main cores of the measure, in favor of the experimental group.
3. There is a statistically significant difference between the experimental and the control group pupils' mean scores on the post administration of the behavior observation checklist in favor of the experimental group.

B) Hypotheses comparing the experimental group mean scores before and after the experiment:
4. There is a statistically significant difference between the experimental group pupils' mean scores on the pre-and post administrations of the attitude towards study measure in favor of the post-administration.

5. There is a statistically significant difference between the experimental group pupils' mean scores on the pre-and post administrations of the loyalty measure, according to the whole score, in favor of the post-administration.

6. There is a statistically significant difference between the experimental group pupils' mean scores on the pre-and post administrations of the loyalty measure, according to the analytical scoring on the four main cores of the measure, in favor of the post-administration.

7. There is a statistically significant difference between the experimental group pupils' mean scores on the pre-and post administrations of behavior problems measure in favor of the post-administration.

8. There is a statistically significant difference between the experimental group pupils' (males and females) mean scores on the pre-and post administrations of physical ability test in favor of the post-administration.

**Delimitations of the study:**

- The present study was conducted on a number of 240 pupils chosen from among first, second, and third grade pupils enrolled in Gamal Abdel-Naser primary school and a number of 274 fourth, fifth, and sixth grade pupils. This school is located in El-Marg educational zone, Big Cairo, Egypt. Thus the results are not to be generalizable.

- The study lasted for a whole school academic year, 2009/2010.

- The study was also limited to investigate the effect of the suggested design of activities on the following dependent variables only:
  - Modifying arbitrary bad behaviors.
  - Developing attitude towards studying.
  - Developing loyalty values, towards self, family, school, and the country.
  - Developing pupils' physical fitness.

- The study was limited to applying four main research tools: attitude towards studying measure, loyalty measure, behavior problems measure, and physical Ability test as both pre- and post-intervention measurement tools.

**Importance of the research project:**
The importance of the present study lies in the following:

1. It directs the attention of stakeholders and university staff members to the importance of developing loyalty values among slums pupils.
2. It sheds light on the importance of early intervention in overcoming negative attitudes towards school and studying among primary pupils due to its significant role in increasing the percentage of school drop out.
3. It expands university student teachers’ repertoire of activities, techniques, tools, and strategies beyond the typical instructional and logical ones predominantly used in the Egyptian primary classrooms that help in modifying behaviors, developing values and changing attitudes of the pupils.

**Key terms of the research:**

- Values Concepts: ideas, beliefs or understandings one has that guide and are reflected in one's behavior
- Values Education: the process of providing opportunities for the continuous development in all students of the knowledge, skills and attitudes related to certain values which lead to behavior exhibiting those values
- Character: attributes or features that make up and distinguish the individual; the complex of mental and ethical traits making a person, group or nation
- Character Concepts: actions, attitudes and practice that characterize a person. Acting honorably under all circumstances, even when it is to the disadvantage of the self
- Character Education: the proem by which positive personality traits are developed, encouraged and reinforced through example, study (history and biography of the great and good) and practice (emulation of what has been observed and learned).

In the present study character education or building is illustrated in modifying some of the arbitrary and negative behaviors (stealing, lie, cheating, bad temper, violence, vulgar language, bad communication skills, and expression skills) of primary school pupils living in slums.

- Loyalty: steadfastness or faithfulness to a person, institution, custom or idea to which one is tied by duty, pledge or a promise.

In the present study loyalty refers to pupils' feel of respect, duty, and esteem towards self, family, school, and the country.
The Research Project Description and intended purpose:

The suggested project aimed at directing its services towards socially disadvantaged (underprivileged) pupils at Egyptian general (public) schools mainly in slum areas (EL-Marg) in order to improve their loyalty values, attitude towards studying and modify their arbitrary behaviors as a trial to access their education, acquire better education opportunities, and give them a successful chance at life. The program targets pupils age 6 to 12 and aimed, also, at empowering them through using both formal and non-formal education, particularly through activities and training sessions on basic skills and abilities concentrating on the importance of gender equality. The project idea is to bridge the social gap that those pupils from underprivileged areas suffer by equipping them with a vital set of values, behaviors, attitudes and skills to overcome the exclusion and isolation they live in.

Project Vision:
The Egyptian universities become centers of cultural, social and environmental enlightens in the public as well as local societies and to lead its natural role in eliminating the social problems and social services challenges through contributing in the modification of arbitrary bad behaviors, and development of loyalty values of primary school pupils at underprivileged areas (slums), namely El-Marg area located in big Cairo, within the (100) school development national project under the auspices of Egypt's First Lady/ Suzanne Mubarak.

Project Mission:
Helwan University seeks to provide opportunities for the integrated development of the future university students' personalities and deepen their concepts and the behaviors of social responsibility and citizenship concentrating on the pupils at El-Marg Educational zone (within the 100 Schools Development National Project) through the following tasks:

- Voluntary active participation in the development of El-Marg educational zone primary schools.
- Training university student- teachers on recent educational and training methods for behavior modification and developing the loyalty values towards self, family, school, and the country of El-Marg primary school pupils, as part of the 100 Schools Development National Project.
- Preparing cadres of volunteer faculty members within hierarchy system to share in following up and supervising.
the needs of the actual implementation of the project in the light of the possibilities of infrastructure and material resources available to schools under the project in different activity areas.

- Designing the project activity based program in different educational areas: language, math, physical education, music, art, social work etc and integrated it within the school schedule.
- Designing the pre and post evaluation and assessment tools to monitor the development of abilities and skills of the pupils so as to allow a degree of flexibility in the development and modification of the applied program.

II. Method and Procedure

2.1 Design of the experiment:

The study utilized the control/experimental group design. The independent variable was the use of the suggested design of the integrated instructional and specialized activities throughout all school subjects. The dependent variables were:

- Modifying arbitrary (negative) behaviors.
- Developing loyalty values, towards self, family, school, and the country.
- Developing the physical fitness.

- The design of the experiment can be symbolized as follows:
  Treatment group (T1) ..........ISIA........T2
  Non-treatment group (T1) ........RI..........T2.

T1=pre-testing
T2= post testing.
ISIA= Integrated and Specialized Instructional Activities.
RI= regular traditional teaching.

2.1 Research Sample:
The research sample consisted of:
1. 240 first, second and third year primary pupils (120 in the control group- 120 for the experimental group)
2. 274 fourth, fifth and sixth primary pupils (as one experimental group).

2.3 Measurement Instruments:
(1) **Attitude towards study measure:**

This measure aimed at testing the pupils' attitude towards studying. The measure was used as a pre- and post tool in order to trace the change in the pupils' attitude towards studying if it occurs. In order to identify the measure dimensions and to construct the measure items the related literature was reviewed and the researchers chose a group of statements that suits primary pupils' level. The first version of the measure consisted of 55 statements.

**Validity of the measure:**

The measure was given to a group of experts in the field. They were asked to examine the clarity of the language of the measure statements and the extent to which each statement was related to its specific dimension. Some statements were modified others were excluded. The final version consisted of 50 statements.

**Reliability:**

The measure was administered to a group of 25 pupils of the fourth, fifth and sixth primary pupils. After two weeks, the measure was re-administered to the same group. The correlation co-efficient between the pupils' scores on the two administrations of the measure was computed. The reliability co-efficient was (0, 87) that was statistically significant at 0.01 and 0.05.

(2) **Behavior problems measure:**

**Aim:**

In order to answer the first question of the present study: "what are the arbitrary bad behaviors of primary pupils living in slums?", the researchers designed this measure, to be used in determining the most critical arbitrary behaviors (quantitative estimation) to be modified for the slums primary pupils and on which the study would be based. The following is a full description of this measure.

**Description:**

The measure was prepared by the researchers in the light of:
- Field visits and recorded observations.
- An interview (informal) with primary teachers and supervisors at slum areas.
- An intensive review of literature. The researchers reviewed some designed tools for measuring behavioral problems in general, Mahmoud (2006), El Sharkawy (2003), Abaza (2003), El-Harony
and used them as a guide in forming the measure items that suits primary school pupils living in slums. The review resulted in a preliminary list comprising 6 behavior problems.

The first version of the measure included six main-behaviors namely: violence, destruction, theft, lie, and escape from school, each behavior had a number of statements that represent the measure items with a total number (60 statements). The measure statements were formed to be clear, simple, not misleading, and suits the primary pupils' level. The assessment scale adopted for the measure was mainly a four point scale. The four grades included in the measure were: always, sometimes, rarely, never. Each level of these was given an estimated value. The first level (i.e., always) took 4), the second level (i.e., sometimes) took (3), the third level (i.e., less rarely) took (2), and the fourth level (never) took (1). Hence the total scores of the measure ranged between (56: 224), as the high score on the measure mean that the pupil had behavior problems while low score means the opposite.

Validity of the measure:

To validate the measure, it was submitted to a jury committee who modified some statements. The jury members were kindly asked to apply their comments and notes regard to the following points:
- Clarity of the items and elements of the measure.
- Adding any other behaviors that are critical for those pupils.
The researcher made the necessary modifications and the measure in its final version contained 56 statements under six main behaviors.

Reliability of the measure:

The measure was administered to a group of the fourth, fifth and sixth primary pupils other than the research sample. After two weeks, the measure was re-administered to the same group. The correlation co-efficient between the pupils' scores on the two administrations of the measure was computed. The reliability co-efficient was (0, 91) that was statistically significant at 0.01.

(3) The loyalty measure:

Aim:
In order to answer the third question of the present study: "What is the effect of the suggested design in developing loyalty values among the experimental group pupils?" The researchers
designed this measure. They also administered it as a pre- and post-intervention measurement to see if pupils' loyalty level changed in order to modify the study hypotheses related to loyalty.

This measure was divided into two sub measures: a photographic measure to be applied on first, second and third grade primary pupils (age group: 6-9), and a situation based measure to be applied on fourth, fifth and sixth grade primary pupils (age group: 10-12). Following is a full description of the two sub measures:

A. The photographic copy of the measure:

Constructing the measure:

The following procedures were followed in constructing the measure:

1. Reviewing literature and standardized measures i.e., Abdel-Fatah Gazal measure of estimating the concept of loyalty for preschool children (2001), and Olfat Elaraby photographic measure (2000).
2. Identifying the main characteristics of this age group (6-9) and putting them in consideration as basis for building the items of the measure.
3. Designing the main cores of the measure which came to comprise four main cores of loyalty: towards self, family, school, and the country.
4. Selecting the alternative photos of the measure according to the following standards:
   - Simple clear picture, in order to avoid ambiguity from the pupil.
   - Uncolored photos, in order to avoid pupils' choice depending on preferred colors.
5. Designing the measure criteria (56) distributed as follows:
   - A choice among a group of pictures that deal with loyalty towards oneself (pictures 1-10) that represent pupil's loyalty towards his sex (male/female), personal cleanness, and self independent.
   - A choice among a group of pictures that deal with loyalty towards family (pictures 11-26). These pictures represent the social level of the pupil, relation with his/her family, role at home, identification of the main structure of his/her home, and level of satisfaction towards it.
   - A choice among a group of pictures that deal with loyalty towards the school (pictures 27-41). These pictures represent pupils' loyalty to school community and his/her participation in school activities.
   - A choice among a group of pictures that deal with loyalty towards the country (pictures 42-56). These pictures represent the pupil's
level in distinguishing his country flag, president, national sport team, monuments and tourism places.

6. Designing the measure in its first version.
7. Submitting the survey to the jury members and modifying it according to their suggestions. In the light of the jury recommendations some pictures were omitted because they do not represent their related core clearly (i.e. pictures 5 &6) and replacing them with other more related pictures. Also pictures 17, 18 and 19 were excluded.
8. Writing and revising the measure in its final version (see appendix A).

**Reliability of the measure:**

To determine the reliability of the loyalty measure, the test-retest method was used. The measure was administered to a randomly chosen sample of 20 pupils, other than the sample of the experiment. Then it was re-administered to the same group after 3 weeks. Correlation between pupils' scores on the two administrations of the test was computed using Pearson's correlation coefficient ratio. The resulting reliability coefficient was found to be high (0.85). Table (1) shows how the reliability of the test was calculated:

<table>
<thead>
<tr>
<th>administration</th>
<th>M</th>
<th>S.D</th>
<th>N</th>
<th>Pearson's coefficient ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>first</td>
<td>47.9</td>
<td>10.68</td>
<td>20</td>
<td>0.85</td>
</tr>
<tr>
<td>second</td>
<td>71.1</td>
<td>7.05</td>
<td>20</td>
<td></td>
</tr>
</tbody>
</table>

**Scoring of the measure:**
The researchers used a rating scale of three levels, the marks of the scale range from 0 to 2. Two indicates the highest level while zero is the lowest. The best level is level two which means two marks of two. So the full mark of the measure was (40) marks (2 x 20).

**B. The situation based copy of the measure:**

**Constructing the measure:**

The following procedures were followed in constructing the measure:

1. Reviewing literature and standardized situation based measures trying to identify: what is meant by loyalty, components, and what are the main dimensions of loyalty measure.
2. Identifying the main characteristics of this age group (10-12) and putting them in consideration as basis for building the items of the measure.

3. Designing the main cores of the measure which came to comprise six main cores representing pupils' loyalty to their country: loyalty to the country, maintains identity, proud of country civilization and history, sacrifice for the country (by self or effort or money), preserve the country monuments (Antiquities), and preserving the environment.

4. forming the situations of the measure, in its first version according to the following standards:
   - Simple clear situations, each situation represent one idea concerning one of the six cores of the measure, in order to avoid ambiguity from the pupil.
   - Forming the measure situations in the form of scenarios using simple and clear words.
   - Each situation is followed by three choices expressing three levels of pupil's loyalty degree.

5. After forming the measure situations it was reread by the researchers after two weeks, in order to avoid familiarity of the situations of the measure.

6. selecting the measure situations (30 out of 48) depending on the following criteria:
   - Covering the six cores of the measure,
   - Reality based situations that pupils face in and outside school,
   - Suitable to the mental, affective, social, and behavioral levels of the primary pupils living in slums.

7. Designing the measure in its first version.

8. Submitting the survey to the jury members and modifying it according to their suggestions. In the light of the jury recommendations some situations were reformed because they do not suit pupils' level.

9. Writing and revising the measure in its final version (see appendix B).

**Reliability of the measure:**

To determine the reliability of the loyalty measure, the test-retest method was used. The measure was administered to a randomly chosen sample of 60 pupils, other than the sample of the experiment. Then it was re-administered to the same group after 3 weeks. Correlation between pupils' scores on the two administrations of the test was computed using
Pearson's correlation coefficient ratio. The resulting reliability coefficient was found to be high (0.82).

**Scoring of the measure:**
The researchers used a rating scale of three levels, the marks of the scale range from 0 to 2. Two indicates the highest level while zero is the lowest. The best level is level two which means two marks of two, so the full mark of the measure was (60) marks (2 x 30).

**(4) The Physical Ability (PA) Test:**
It included the following group of sub-tests that test pupils' ability in:
- Running a distance of 30 meters with an average time.
- Jumping an average distance.
- Draping onyx with an average length.
- Side-stepping within 10 seconds with an average number of steps.
- Pressing within 60 seconds with an average number.
- Bending forward within 30 seconds with an average number.

**Aim of the research Project:**
This project aimed at:
- Directing a group of various suggested instructional activities throughout the education process to achieve the development of slums primary pupils' loyalty values, behavioral skills associated with some positive social values, attitudes towards studying, and physical fitness.

**Objectives of the research project:**
By the end of the project pupils should be able to:
- Practice some well mannered and civilized behaviors with their colleagues as well as teachers and other adults inside and outside school.
- Express their loyalty towards self, family, school, and the country in form of both positive behaviors, learning outcomes in different school activities.
- Display a positive attitude towards school and studying/learning.

**Activities of the research project:**
1. Dramatization.
2. Role playing,
3. puppet theatre,
4. Story telling.
5. Educational songs
6. Art activities,
7. Activities for sporting competitions, fitness exercises,
8. Musical activities,
Activities for the theater,
10. The activities of family home affairs, and
11. Arranging cultural and social meetings.

Mechanisms for the project implementation:

This project was implemented in a number of primary, preparatory and secondary schools in a poor underprivileged (slum) area, El-Marg educational zone located in big Cairo, but the statistical results reported here are restricted to only one primary school (Gamal Abdel-Naser). A Plan was developed to implement the project over the full academic year (2009/2010) in accordance with the following stages:

- First: planning and preparation stage:
  - Identify the number of faculty's members and their assistants supervising the implementation of the project from the seven sharing faculties of Helwan University, the total number was 40 faculty members.
  - Identifying the number of student teachers participating in the project experiment (47 student teachers from the seven faculties).
  - Concentrating on one primary school (Gamal Abdel-Naser School) for applying the research tools.
  - Prepare the activities of the project program, which support and improve the pupils loyalty values towards self, family, school and the country, attitude towards studying/learning, and develop and modify their arbitrary behaviors, using a specialized faculties including: Faculty of Education, Faculty of Physical Education (Boys), Faculty of Physical Education (Girls), Faculty of Art Education, Faculty of Music Education, and Faculty of Home Economics.
  - Identify the requirements and facilities for the completion of the training and educational activities of the suggested program at the identified school.
  - Determining the start date of the suggested program application to be on 5/10/2009 and the ending date to be on 18/4/2010.
  - Held introductory sessions with the student teachers, participating in the project, in each faculty to make them familiar with the project aim, educational objectives and Train them on recent and effective methods for attaining the project aim according to the specialization of each faculty in an integrated way.
  - Designing the project evaluation tools, the project made use of implementing some scientific assessment tools, prepared by some
of the university specialized staff in the area of educational evaluation and assessment, in order to make use of the findings of these tools in identifying the positive as well as the negative aspects of the project implementation aiming at utilizing these valuable findings in applying the project in other new areas in the future. The project tools included: loyalty measure, behavior observation checklist and physical ability tests to measure the effect of the suggested project activities.
- Validating the evaluation tools by submitting them to a jury.
- Piloting the tools and calculating their reliability.

- Second: the implementation phase:

The action plan:

- Pre-administering the project evaluation tools to the treatment group (Gamal Abdel-Naser primary school pupils) before starting the application of the suggested activities.
- Applying the suggested program activities, through
- Determining the number of school days for implementing the project activities (5) days per week (Sunday, Monday, Tuesday, Wednesday, and Thursday),
- Announcing the schedule of the suggested program activities and matching it with the school schedule,
- Following-up the implementation process of the program through discussing the problems and providing suitable solutions from the supervision team, and
- Rewarding pupils who made a remarkable success in the targeted objectives as well as other educational activities, sports and art, music, computer etc; with simple gifts presented from Heliopolis assembly and Helwan University.
- Administering the project evaluation tools as post tests for the pupils

- Third: the Evaluation stage:
- Analyzing the obtained data statistically using the appropriate techniques.
- Interpreting the results, and coming to conclusions and recommendations.

Results

The results of this study were presented by relating them to the hypotheses of the study.
a) Hypotheses concerned with comparing between the experimental and control groups mean scores on the post tests:

To confirm the validity of the first and second hypothesis the "t" test for independent samples was used to compare the mean scores of the two groups on the post application of the loyalty measure, both according to holistic and analytical scoring. The calculated t values (6.2), (11.21), (6.78) on the total holistic scoring and on the analytical scoring of the four cores of the measure: (3.20), (3.81), (3.27), (5.79) for the first grade, (4.96), (9.14), (8.79), (8.34) for the second grade and (5.14), (3.48), (3.92), (2.88) for the third grade respectively were statistically significant at 0.05 level (See table 3). Thus, it can be safely said that the first and the second hypothesis were confirmed.

Table (2)
Mean, standard deviation for both experimental and control groups on post application of the loyalty measure according to the four main cores and total score of the measure.

<table>
<thead>
<tr>
<th>The main cores Loyalty towards:</th>
<th>First grade</th>
<th>Second grade</th>
<th>Third grade</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Self</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exp</td>
<td>40</td>
<td>9.33</td>
<td>0.96</td>
</tr>
<tr>
<td>Con</td>
<td>40</td>
<td>8.4</td>
<td>1.28</td>
</tr>
<tr>
<td>Family</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exp</td>
<td>40</td>
<td>8.37</td>
<td>0.93</td>
</tr>
<tr>
<td>Con</td>
<td>40</td>
<td>7.37</td>
<td>1.1</td>
</tr>
<tr>
<td>School</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exp</td>
<td>40</td>
<td>8.83</td>
<td>1.12</td>
</tr>
<tr>
<td>Con</td>
<td>40</td>
<td>7.7</td>
<td>1.53</td>
</tr>
<tr>
<td>The country</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exp</td>
<td>40</td>
<td>9.10</td>
<td>1.18</td>
</tr>
<tr>
<td>Con</td>
<td>40</td>
<td>7.2</td>
<td>1.39</td>
</tr>
<tr>
<td>Total score</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exp</td>
<td>40</td>
<td>35.40</td>
<td>2.46</td>
</tr>
<tr>
<td>Con</td>
<td>40</td>
<td>30.5</td>
<td>3.78</td>
</tr>
</tbody>
</table>

Table (3) "t" value of the differences between the mean scores of the experimental and control groups pupils on the post administration of the loyalty measure.

<table>
<thead>
<tr>
<th>The four Cores Loyalty to:</th>
<th>First grade</th>
<th>Second grade</th>
<th>Third grade</th>
<th>Sign at</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>T</td>
<td>M</td>
<td>T</td>
</tr>
<tr>
<td>Self</td>
<td>0.93</td>
<td>3.20</td>
<td>1.57</td>
<td>4.96</td>
</tr>
<tr>
<td>Family</td>
<td>1</td>
<td>3.81</td>
<td>2.27</td>
<td>9.14</td>
</tr>
<tr>
<td>School</td>
<td>1.33</td>
<td>3.27</td>
<td>2.77</td>
<td>8.79</td>
</tr>
<tr>
<td>Society</td>
<td>1.93</td>
<td>5.79</td>
<td>2.7</td>
<td>8.34</td>
</tr>
<tr>
<td>Total score</td>
<td>5.1</td>
<td>6.2</td>
<td>9.47</td>
<td>11.21</td>
</tr>
</tbody>
</table>
Verifying the third hypothesis. In order to verify the validity of this hypothesis, t-tests for independent samples were used to compare the mean scores of the two groups on the post-application of the behavior observation checklist.

Table (4) below shows Means, Standard Deviations, and t-value obtained by subjects of both the treatment and the control groups in the post-application of the behavior observation checklist.

Table (4)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Experimental group</th>
<th>Control group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>means</td>
<td>SD</td>
</tr>
<tr>
<td>Behavior observation checklist</td>
<td>25.93</td>
<td>1.887</td>
</tr>
</tbody>
</table>

Table (4) indicates that there were statistically significant differences between mean of scores obtained by subjects of both the experimental and control group on the post-application of the checklist favoring the experimental group. For the experimental group "t-value" was (50.12). This value was significant at the level of (0.01). Moreover, the estimated effect size value (8.50) reveals that the suggested activities of the project had a large effect on the experimental group students' behavior modification as compared to the control group.

b) Hypotheses focusing on comparing between the experimental group mean scores before and after the treatment:

The fourth hypothesis. In order to verify the validity of this hypothesis the attitude measure was administered before and after the application of the experiment. The main aim was to trace the change in pupils' attitude towards studying as a result of using the suggested instructional activities. The researcher did all the statistical procedures that were needed to find out if the change in the pupils' attitude has occurred or not.

To make sure whether this change in pupils' attitudes towards studying was statistically significant, T-test for paired samples was used to find if there is a statistically significant difference between the mean scores of the experimental group in their attitudes before and after the application of the study as shown in table (5).
Table (5)
T-test results comparing the pre-application vs. post application of the attitude measure.

Paired samples statistics

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>N</th>
<th>SD</th>
<th>T</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-application</td>
<td>33.43</td>
<td>274</td>
<td>6.43</td>
<td>-18.48</td>
<td>Sig at 0.01</td>
</tr>
<tr>
<td>Post-application</td>
<td>40.41</td>
<td></td>
<td>5.80</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table (5) illustrates that there was statistically significant differences at 0.01 level of significance in the attitude towards studying between the mean scores of the experimental group in the pre-post application of the measure in favor of the post-application scores. From the table, it can be indicated that t-value (-18.48) is significant at 0.01 level in favor of post application. The mean of the post application was higher than that of the pre-application in the experimental group (40.41).

**fifth and the sixth hypotheses.** To determine the relative extent of change fostered by the implementation of the proposed activities from the pre-test to the post-test for the experimental group, t-test for paired samples was used. This t-test aimed at comparing the mean scores of the treatment group on the pre-test and the post-test in loyalty values according to holistic and analytical scoring of the measure in its two copies (the photographical copy for grades one, two, three and the situation based one for grades four, five, and six).

Firstly, the results of the photographical copy of the loyalty measure: the calculated t-values was (6.03), (9.48), (6.21) on the holistic scoring and (3.99), (3.81), (2.85), (7.05) for the first grade, (4.59), (8.28), (8.38), (8.35) for the second grade, and (4.38), (3.94), (3.70), (2.39) for the third grade according to the analytical scoring of the measure. All 't' values were significant at 0.05 level (see table 6). Thus, it can be said that the t-results proved to be statistically consistent with the hypotheses.
Table (6)
Mean, standard deviation of the experimental group pupils on the pre and post administration of thephotographical copy of the loyalty measure

<table>
<thead>
<tr>
<th>The main cores Loyalty towards:</th>
<th>First grade</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>Second grade</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>Third grade</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>M</td>
<td>SD</td>
<td>N</td>
<td>M</td>
<td>SD</td>
<td>N</td>
<td>M</td>
<td>SD</td>
<td>N</td>
<td>M</td>
<td>SD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self Pre</td>
<td>40</td>
<td>8.37</td>
<td>1.38</td>
<td>40</td>
<td>7.87</td>
<td>1.55</td>
<td>40</td>
<td>8.57</td>
<td>1.01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post</td>
<td>40</td>
<td>9.33</td>
<td>0.96</td>
<td>40</td>
<td>9.43</td>
<td>0.77</td>
<td>40</td>
<td>9.47</td>
<td>0.51</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family Pre</td>
<td>40</td>
<td>7.39</td>
<td>1.13</td>
<td>40</td>
<td>6.60</td>
<td>0.89</td>
<td>40</td>
<td>8.03</td>
<td>1.10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post</td>
<td>40</td>
<td>8.37</td>
<td>0.93</td>
<td>40</td>
<td>8.83</td>
<td>1.05</td>
<td>40</td>
<td>9.03</td>
<td>1.13</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School Pre</td>
<td>40</td>
<td>7.77</td>
<td>1.63</td>
<td>40</td>
<td>6.67</td>
<td>1.58</td>
<td>40</td>
<td>8.47</td>
<td>1.04</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Post</td>
<td>40</td>
<td>8.83</td>
<td>1.12</td>
<td>40</td>
<td>9.37</td>
<td>0.72</td>
<td>40</td>
<td>9.30</td>
<td>0.84</td>
<td></td>
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</tr>
<tr>
<td>The country Pre</td>
<td>40</td>
<td>7.10</td>
<td>1.30</td>
<td>40</td>
<td>7.10</td>
<td>1.63</td>
<td>40</td>
<td>8.83</td>
<td>1.21</td>
<td></td>
<td></td>
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<tr>
<td>Post</td>
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<td>1.18</td>
<td>40</td>
<td>9.77</td>
<td>0.68</td>
<td>40</td>
<td>9.47</td>
<td>0.86</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Total score Pre</td>
<td>40</td>
<td>30.40</td>
<td>3.83</td>
<td>40</td>
<td>27.97</td>
<td>3.86</td>
<td>40</td>
<td>33.90</td>
<td>2.43</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Post</td>
<td>40</td>
<td>35.40</td>
<td>2.46</td>
<td>40</td>
<td>37.30</td>
<td>2.51</td>
<td>40</td>
<td>37.30</td>
<td>2.02</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table (7)
Means, "t" value of the experimental group subjects on the pre and post administrations of the loyalty measure

<table>
<thead>
<tr>
<th>The four Cores Loyalty to:</th>
<th>First grade</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>Second grade</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>Third grade</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>T</td>
<td>M</td>
<td>SD</td>
<td>T</td>
<td>M</td>
<td>SD</td>
<td>T</td>
<td>M</td>
<td>SD</td>
<td>T</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self</td>
<td>0.97</td>
<td>1.33</td>
<td>3.99</td>
<td>1.57</td>
<td>1.87</td>
<td>4.59</td>
<td>0.90</td>
<td>1.12</td>
<td>4.38</td>
<td>0.05</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family</td>
<td>1</td>
<td>1.44</td>
<td>3.81</td>
<td>2.23</td>
<td>1.48</td>
<td>8.28</td>
<td>1</td>
<td>1.39</td>
<td>3.94</td>
<td>0.05</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>School</td>
<td>1.07</td>
<td>2.05</td>
<td>2.85</td>
<td>2.70</td>
<td>1.76</td>
<td>8.38</td>
<td>0.83</td>
<td>1.23</td>
<td>3.70</td>
<td>0.05</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Society</td>
<td>1</td>
<td>1.55</td>
<td>7.05</td>
<td>2.67</td>
<td>1.75</td>
<td>8.35</td>
<td>0.63</td>
<td>1.45</td>
<td>2.39</td>
<td>0.05</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Total score</td>
<td>5.20</td>
<td>4.72</td>
<td>6.03</td>
<td>9.33</td>
<td>5.39</td>
<td>9.48</td>
<td>3.40</td>
<td>3</td>
<td>6.21</td>
<td>0.05</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Moreover, the effect size of the independent variable (the proposed activities) was calculated in its relation to the dependent variable (developing the experimental subjects' loyalty values) using "t" values for the differences between the means to get Etta square $\eta^2$ whose value shows the effect size.

Table (8)

"t" value and η² of the treatment group subjects on the pre and post administrations of the photographic copy of the loyalty measure
Effect size of the proposed activities on the experimental group loyalty values

<table>
<thead>
<tr>
<th>grades</th>
<th>T</th>
<th>η²</th>
<th>d</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>First</td>
<td>6.03</td>
<td>0.65</td>
<td>2.26</td>
<td>High</td>
</tr>
<tr>
<td>Second</td>
<td>9.47</td>
<td>0.76</td>
<td>3.56</td>
<td>High</td>
</tr>
<tr>
<td>third</td>
<td>6.21</td>
<td>0.57</td>
<td>2.30</td>
<td>High</td>
</tr>
</tbody>
</table>

Secondly, the results of the situation based copy of the loyalty measure:

Table (9)
Means, std. Deviation, and "t" value of the experimental group subjects on the pre and post administrations of the loyalty measure (the situation based copy)

<table>
<thead>
<tr>
<th>Administration</th>
<th>M</th>
<th>S.D</th>
<th>Paired differences</th>
<th>'t' value</th>
<th>tabulated 't'</th>
<th>Sig. at</th>
</tr>
</thead>
<tbody>
<tr>
<td>pre</td>
<td>21.47</td>
<td>4.114</td>
<td>M</td>
<td>37.39</td>
<td>2.37</td>
<td>0.01</td>
</tr>
<tr>
<td>post</td>
<td>49.37</td>
<td>3.447</td>
<td>s</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The above table shows the following:
- There was statistically significant difference between the mean scores of the experimental group on the pre and post administrations of the loyalty test (situation based copy) in favor of the post administration where the mean score of the post administration was 49.37, std. deviation 3.447, whereas the mean score in the pre administration was 21.47, std. deviation was 4.114. The 't' value between the two means was 37.39 which is significant at 0.01 level as the tabulated 't' is 2.37.

So, it is clear from the results shown in table (9) that the improvement in the post administration of the loyalty measure (the situation based copy) is totally significant.

The sixth hypothesis. The data required for testing this hypothesis was obtained by calculating and comparing the mean scores of the experimental group pupils on the pre and the post administration of the behavior observation checklist. The t-test procedure was used to assess the significance of the difference between the mean scores of the participants on the pre-post behavior observation checklist application (See table 10). The calculated t-value was (51.811). This difference is considered to be extremely statistically significant at level of 0.01 favoring the mean scores of the participants on the post-test. The
difference between the two means (pre and post) confirmed that the suggested program was positively effective in modifying the participants' behavior.

Table (10)
Means, std. Deviation, and "t" value of the experimental group subjects' scores on the behavior observation checklist

<table>
<thead>
<tr>
<th>Application</th>
<th>Mean</th>
<th>S. D</th>
<th>Paired differences</th>
<th>D. F</th>
<th>'t' value</th>
<th>Level of sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>pre</td>
<td>11.37</td>
<td>2.255</td>
<td>14.467</td>
<td>29</td>
<td>51.811</td>
<td>Sig. at 0.01</td>
</tr>
<tr>
<td>Post</td>
<td>25.84</td>
<td>1.627</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The seventh Hypothesis. In order to verify the validity of this hypothesis T-test for paired samples was used to find if there is a statistically significant difference between the mean scores of the experimental group in their behaviors before and after the application of the study as shown in table (11).

Table (11)
T-test results comparing the pre-application vs. post application of the behavior problems measure.

Paired samples statistics

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>N</th>
<th>SD</th>
<th>T</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-application</td>
<td>76.73</td>
<td>274</td>
<td>21.52</td>
<td>14.18</td>
<td>Sig at 0.01</td>
</tr>
<tr>
<td>Post-application</td>
<td>60.47</td>
<td></td>
<td>5.57</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table (11) illustrates that there was statistically significant differences at 0.01 level of significance in the modification of the pupils behavior problems between the mean scores of the experimental group in the pre- post application of the measure in favor of the post-application scores. From the table, it can be indicated that t-value (14.18) is significant at 0.01 level in favor of post application.

The eighth Hypothesis. It predicted that there is a statistically significant difference between the experimental group pupils' (female and male) means scores on the pre-and post administrations of the physical ability test in favor of the post-administration. In order to verify the validity of this hypothesis the physical ability test was administered before and after the application of the suggested activities of the project. The main aim was to trace the change in pupils' physical ability as a result of using the suggested activities. T-test for paired samples was used
to find if there are statistically significant differences between the mean scores of the experimental group in their physical ability before and after the application of the study. Female-Students showed progress in their physical abilities which was demonstrated by the differences between their average scores of the post application of the physical abilities test (PA-test) which was /pre applied to a sample of (n=60) pupils, and the following is a display of the results:

1- The results showed progress of the students’ ability to run a distance of 30 meters with an average time (11.924 seconds) during the pre application, while the average time made by the pupils during the post application was (9.44 seconds), bringing the difference between the averages of each of the pre /post application to (2.478 seconds).

2- The results showed progress of the students’ ability to jump from an average distance (1.07m) during the pre application, while the average distance made by the pupils during the post application was (2.198m), bringing the difference between the averages of each of the pre / post application to (1.28 m).

3- The results showed progress of the students’ ability to Drape Onyx from an average length (1.105 cm) during the pre application to (2.915 cm) average length during the post application, bringing the difference between the averages of each of the pre / post application to (1.71 cm).

4- The results showed progress in the ability of pupils to Side-Step within 10 seconds with an average number of steps that reached (2.916 ~ 3 steps) during the pre application, while the average number of steps made by the pupils in the post application was (5.533 ~ 6 steps), bringing the difference between the averages of each of the pre / post application to (3 side-steps).

5- The results showed progress in the ability of pupils bend their stem forward within 60 seconds with an average number that reached (2.45 ~ 2 times) during the pre application, while the average number of times made by the pupils during the post application was (5.133 ~ 5 times), bringing the difference between the averages of each of the pre / post application to (3 times).

6- The results showed progress in the ability of pupils to press within 30 seconds with an average number that reached (2.166 ~ 2 times)
during the pre application, while the average number of times made by the pupils in the post application was (4.766 ~ 5 times), bringing the difference between the averages of each of the pre / post application to 3 times.

7- The results showed progress in the ability of pupils to simulate movements with an average score (1.7 marks) during the pre application, while the average score made by the pupils in the post application was (3.483 marks), bringing the difference between the averages of each of the pre / post application to (1.783 marks).

The following graph shows the average scores of the female pupils at the pre and the post application of the (PA-test)

Also, Male-Pupils showed progress in their physical abilities which was demonstrated by the differences between their average scores of the pre / post application to the physical abilities test (PA-test) which was applied to a sample of (n=130) pupils, and the following is a display for the results:

1- The results showed progress of the students’ fitness with an average time (14.240 seconds) during the pre application, while the average time during the post application was (20.699 seconds), bringing the difference between the averages of each of the pre /post application to (-ve 6.459 seconds).
2- The results showed progress of the students’ ability to jump with an average length (1.03106m) during the pre application, while the average distance made by the pupils during the post application was (1.1926m), bringing the difference between the averages of each of the pre / post application to (0.16154m).

3- The results showed progress in the ability of pupils to run a distance of 50m with an average time (16.985sec) during the pre application, while the average time made by the pupils in the post application was (13.994sec), bringing the difference between the averages of each of the pre / post application to (2.99sec).

4- The results showed progress in the ability of pupils to endurance with an average distance that reaches (12.84m) during the pre application, while the average distance made by the pupils during the post application was (43.884m), bringing the difference between the averages of each of the pre / post application to (31.04m).

5- The results showed progress in the pupils' flexibility with an average distance that reaches (0.0617cm) during the pre application, while the average distance made by the pupils in the post application was (2.9838cm), bringing the difference between the averages of each of the pre / post application to (2.3668cm).

The following graph shows the average scores of the pupils at the pre and the post application of the (PA-test)
Discussion of the results

Most important results of the project:
This research project through its specialized activities contributed in:

1. The development of the pupils' loyalty values, towards self, family, school, and the country, through a group of instructional and specialized activities developed by the seven participated faculties of Helwan University, that aimed at improving the capacity of those pupils. This result is consistent with El-said study (2001) that assured the role of art education in developing students' loyalty values and that was actually observable in the present research project through involving pupils in drawing activities through which they express their loyalty to their school, country, and family. Moreover, organizing an exhibition for pupils' drawings gave them more motivation and supported their self esteem and attitude towards school. Again, studies of Bedar (1995) and Pachano (1997) stressed the effective role of both indoor and outdoor activities in developing pupils' loyalty. Elaraby's study (2000) that aimed at designing an instructional program based on folklore stories and measuring its effect on developing loyalty value among kindergarten children, recommended the critical need for such programs that focus on developing students' loyalty throughout all school stages.
2. The modification of the pupils' arbitrary behaviors through the development of behavioral skills associated with some positive social values. This was carried out through involving pupils' throughout all school subjects and other specialized activities in practicing activities through which they express their feelings, ideas, opinions in a well civilized manner, model certain behaviors through role playing, dramatization of certain parts of history, science or Arabic school curriculum, and training them on acceptable ways for discussion and respecting others.

3. The preparation of Helwan University student-teachers to confront community-based problems as a trial for preparing them to meet the challenges of the labor market. Student teachers reflected their satisfaction concerning this experience commenting that they not only developed their teaching skills but also they actually developed their loyalty towards their society and its problems through sharing in teaching those pupils living in slums as part of their society.

Actually, there were certain reasons behind the success of this research project, following are the main positives of the project:

1. The systematic preparation, planned distribution of the varied activities, of the seven faculties involved in the project, and integrating them within the school study schedule throughout five days of the week this is to ensure the proper functioning of the project study program.

2. Unequivocal support of the Egyptian Assembly of Heliopolis (for social work) under the supervision of Mrs. Mai Zeid, where her active role was a core reason in the successful implementation of the program of the project through supporting the project by:
   a) Providing the tools and raw materials necessary for implementing the specialized activities of the project in the field of: art, music, sport, Home Economics, and social work.
   b) Preparing recreational trips for the pupils and student teachers (trainers).
   c) Providing a meal for each pupil during the break time of the training day.
d) Helping in overcoming all the problems during the course of implementation of the project in coordination with the Ministry of Education and other departments concerned.
e) Buying shoes and t-shirts, track pants for the pupils sharing in the final sport demonstration, as well as providing the tools used in the closing ceremony: flags, sticks and straps.

3. Organizing a closing ceremony of pupils' activities by all faculties involved in the project. This ceremony was attended by the president of Helwan University and other official members representing The Ministry of Education and Heliopolis assembly. Also the ceremony was recorded and displayed by a number of TV official channels. Moreover more than Egyptian newspaper and magazine wrote reports about the project positive results. The closing ceremony included:
   - Sports exhibitions presented by the pupils that assured an advanced level of physical fitness, reflecting the level of growth that pupils reached through the sports activities.
   - Exhibition of the pupils' products in the field of home economics, many of the products associated with the field of embroidery, clothing and the preparation of simple foods.
   - An exhibition of the activities of art education includes samples of pupils' drawings using various raw materials that reflected loyalty values.
   - A theater display for some of educational activities based on the basic education curriculum: poetry, educational songs, puppet glove, a theatrical presentation of the Pantomime, and dramatizing parts of the history curriculum at the basic education. These activities aimed at developing the loyalty values, and modifying the behavior of those pupils. The ceremony ended with songs by the national group of pupils.

4. Organized follow-up system throughout the three stages of the project: preparation, implementation, and evaluation by the administrative team at Helwan University who worked hard to overcome all the internal problems of the schools and to find quick solutions to them in coordination with the Managing team and the executive director of the project.

5. Official visits by a number of officials for the targeted schools of EL-Marg to identify the activities provided to the pupils by faculties of Helwan University, which gave a strong impetus for all workers of the project that led to the success in achieving the objectives of the project.

**Conclusion:**
This research project is considered an effective attribution towards decreasing the wide gap between urban slum primary school children and those in better urban settings in attaining quality education, modifying behaviors, developing loyalty values, and improving attitude towards school. It also shed light on the prevailing conditions in urban area slum primary education and created awareness about the need for policy reforms in education and the local government sector. The research found that overcrowding in classrooms was the biggest challenge to education in slums, standing at 77%-82% in public schools and at 62% in private schools. Teacher-pupil ratio was reported at as high as 1:100-150 in most public schools. Having established that urban-slum conditions were impeding efforts to increase pupil enrollment, participation, retention and attaining quality education for primary school pupils, the project study recommends that government should upgrade slum areas and invest in health, economic, social programs and projects that enhance quality education for slum children. Moreover, the project proposed that government focuses on upgrading slum areas, putting in place methods that improve behavior modification, develop loyalty values, healthy interventions and food security to motivate pupils with healthier and active lives to concentrate on their studies. It recommended affirmative action and sponsorship for slum area pupils by universities, donors, government and international agencies is a significant step towards improving educational as well as behavioral standards of slum pupils.

Building slums pupils' loyalty values, self esteem and self confidence, positive attitudes towards school, broadening their knowledge and sharpening their skills, helps in unlocking their potential and teaches them that they are full members of society. This also equips them with the same tools that pupils of more elite social classes have access to, thereby giving underprivileged youth the opportunity to carve their own niche in the labor market and ascend socially, culturally and economically.

**Recommendations:**

- The project team recommend continuation of this project and the dissemination of its aims, developing loyalty values, attitude towards school and modifying arbitrary behaviors among slums pupils, in many schools of different Egyptian governorates through the Egyptian universities to serve and develop the school pupils in a variety of skills related to course material as well as other different activities (sports - art - music – home economics – social work) and this was confirmed by the positive results of this project implemented at one of Egyptian slums namely El-Marg area.
- Ensure that increased numbers of children, especially girls, living in remote slum areas have access to primary education of good quality;
- support early childhood education programming in disadvantaged slum areas; and,
- Increase community involvement in education by providing advise and funding to grass-root organizations to identify and find local solutions to increase enrolment.
- Planning training programs that focus on training primary school teachers on new and various techniques and activities that help them in developing loyalty among pupils especially at slum areas.
- Giving more importance for indoor and outdoor activities at the primary stage especially those that focus on developing pupils values system and helps in modifying their behaviors in a civilized manner.
References


Appendix (a)
The loyalty photographic measure
For pupils' age (6-9 years)
In its first version

Aim of the measure:
This measure aims at identifying the loyalty level of pupils' age group (6-9) joining the first, second and third primary stages.

The main cores of the measure:
The measure is consisted of four main cores with five questions on each:
- Loyalty to self
- Loyalty to family
- Loyalty to school
- Loyalty to the country

Application of the measure:
It is to be applied on primary pupils individually to assure the subjectivity of their answers.

Instructions:
- Right answer takes two marks
- Wrong answer takes one mark
- If the pupil does not answer he takes zero
## The Measure

Pupil's name:…………………… class:……………………
School:…………………… date:……………………

1. Choose a picture?

<table>
<thead>
<tr>
<th>Picture 1</th>
<th>Picture 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.jpg" alt="Picture 1" /></td>
<td><img src="image2.jpg" alt="Picture 2" /></td>
</tr>
</tbody>
</table>

2. Which one do you prefer?

<table>
<thead>
<tr>
<th>Picture 3</th>
<th>Picture 4</th>
<th>Picture 5</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image3.jpg" alt="Picture 3" /></td>
<td><img src="image4.jpg" alt="Picture 4" /></td>
<td><img src="image5.jpg" alt="Picture 5" /></td>
</tr>
</tbody>
</table>

3. Do you comb your hair by yourself or someone help you?

<table>
<thead>
<tr>
<th>Picture 6</th>
<th>Picture 7</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image6.jpg" alt="Picture 6" /></td>
<td><img src="image7.jpg" alt="Picture 7" /></td>
</tr>
</tbody>
</table>

4. Do you dress yourself or someone help you?

<table>
<thead>
<tr>
<th>Picture 8</th>
<th>Picture 9</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image8.jpg" alt="Picture 8" /></td>
<td><img src="image9.jpg" alt="Picture 9" /></td>
</tr>
</tbody>
</table>

5. Do you study by yourself or depend on someone?

<table>
<thead>
<tr>
<th>Picture 10</th>
<th>Picture 11</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image10.jpg" alt="Picture 10" /></td>
<td><img src="image11.jpg" alt="Picture 11" /></td>
</tr>
</tbody>
</table>
1. Which one do you prefer:

2. Choose the house that looks like yours?

3. Choose the way you eat your meals?

4. Which manner do you use at home

5. Do you watch TV alone, with brother, with family, don’t like it?
1. do you prefer playing alone, with your friends at school, with a slingshot?

2. Which do you prefer: buy and sale, going to school, playing in the street?

3. Chose how your school looks like?

4. if your teacher asked you to share in planting the school yard: share, sleep, go away?

5. How your school library looks like?
1. Who is the hero of your country?

[Images of football players]

2. Which one is your country flag?

[Flag images with options: one with stars, two with Arabic text, one with green stars, one with five green stars, and one with black]

3. Choose your country metro?

[Images of different metro systems]

4. Who is the current president of your country?
5. Which status belongs to your country?
## Appendix (b)

**The situation based copy of the loyalty measure**

<table>
<thead>
<tr>
<th>Family status (have sisters or brothers or both):</th>
<th>Name:</th>
<th>School:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Father's job:</td>
<td>Date:</td>
<td></td>
</tr>
</tbody>
</table>

Put a circle around the statement number that best express you: (note that there is no wrong and right answer, just choose the one that best reflect your ideas):

<table>
<thead>
<tr>
<th>1. when you are sitting with a group of friends from different countries, you.....</th>
<th>2. if you heard someone speaking badly about a patriotic character in your country, what will you do?</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Tell them that ancient Egyptian civilization has become just a memory.</td>
<td>a) Just listen and leave.</td>
</tr>
<tr>
<td>b) Tell them that you want to travel to live in another country.</td>
<td>b) Do not listen to him and leave.</td>
</tr>
<tr>
<td>c) Be proud for being Egyptian citizen who has that great civilization.</td>
<td>c) Try to discuss the point with him and make him aware that what he is saying isn’t true.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3. When you see the blood donation car, you believe that..</th>
<th>4. When you see your neighbors burning garbage in the street, you....</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Donation is a duty as long as your health is good.</td>
<td>a) Ask them not to do this.</td>
</tr>
<tr>
<td>b) Through donation you have rewards (clothes, money, food)</td>
<td>b) Go away from the fire to be save.</td>
</tr>
<tr>
<td>c) Blood donation makes you tired.</td>
<td>c) Convince them about the bad effects of this on the environment.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5. When your school participate in a competition of the educational administration, what will you do?</th>
<th>6. When one of the national team players speaks, in an international conference, in Arabic although he can speak in English, what's your opinion?</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Share and support your school team</td>
<td>a) See that this is a completely right behavior as the player is proud of our language.</td>
</tr>
<tr>
<td>b) Convince your colleges to share</td>
<td>b) See that this is a wrong choice that causes defamation to</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
</tbody>
</table>
| 7. one of your colleges left the water open in the washing room, what will you do?  
| a) Tell the responsible person in the school.  
| b) Make the same.  
| c) Just leave the place. | 8. You read in the newspaper that one of the citizens smuggled an antique abroad, what will you do?  
| a) Be angry because you see that is against your country.  
| b) See that that man must have a cruel punishment.  
| c) Don't be interested as you don't like antiques. |
| 9. If you watched one of the satellite TV channels presenting places that defame your country, what will you do?  
| a) Share in the program to have money  
| b) Share in the program to give a correct picture about your country.  
| c) Refuse to share in such programs that are against your country. | 10. When the football star 'Abou-Trika' was chosen as the best player in Africa, what did you do?  
| a) Was very happy as this is a victory for all Egyptians.  
| b) Wasn't interested as his winning would not benefit you.  
| c) Was happy as he won a lot of money. |
| 11. During your journey to Luxor and Aswan you saw some of your colleges write on the monuments, what will you do?  
| a) Prevent them and tell the supervisor.  
| b) Tell them that what they are doing is wrong, and leave.  
| c) Imitate them. | 12. What is your opinion about Egyptians who search for having another nationality even if they marry a foreigner?  
| a) See that it's their own personal choice.  
| b) See that is against the Egyptian women.  
<p>| c) See that it is wrong to have another nationality. |</p>
<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
</table>
| 13. If you found that your favorite web site presents subjects that are against your country, what will you do? | a) Stop using the site.  
b) Collaborate with your colleges in designing another site that present good ideas about your country.  
c) Do not pay attention as this is not your business. |
| 14. If your school organized a day for cleaning the classes, what will you do?       | a) Share happily in the work.  
b) Do not share as you see there are others who should do it.  
c) Encourage your colleges to share with you in the cleaning work. |
| 15. During your visit to the pyramids you met a group of tourists talking about their countries, what will you say? | a) Be proud of your self being an Egyptian.  
b) Tell them that you prefer to live in their countries.  
c) Tell them that Egypt was developed in the past but know every thing changed. |
| 16. If you see a college throwing garbage in the school yard, what will you do? | a) Just leave as it is your business.  
b) Try to advice him that this is a bad behavior.  
c) Collect the garbage in front of him and put it in the basket to feel him with his fault. |
| 17. during your stay in a hotel there were a lot of foreign children who were doing some behaviors that are against our customs and traditions and asked you to share them, what did you do? | a) Refuse and just watch what they are doing.  
b) Accept their offer as these behaviors are not bad in their societies.  
c) Refuse and leave as you respect your country customs and traditions. |
| 18. Your school organized a journey to one of the museums that have old monuments and antiques, what will you do? | a) Join it as this will help you in studying the history subject.  
b) Join as this will help you in getting familiar with your country civilization.  
c) Join just for having the chance to play and enjoy good time with your colleges. |
19. If someone asked you to tell him some private information about your father's job who is a police man and that he will give you a lot of money, what will you do?
   - Refuse and tell your father.
   - Accept and take the money.
   - Refuse and do not tell anyone.

20. What is your opinion about those shop owners who give their shops foreign names?
   a) Agree with them.
   b) Prefer using Arabic names as it is our language.
   c) Agree on foreign names accompanied by translation of the name in Arabic.