

Reforming Education System in Developing Countries

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Abstract: This paper aims to introduce new model for education in developing countries based on the challenges that face education in these countries. Developing countries always suffer from some problems that hinder development of education and its outcomes such as: political instability, economic difficulties, socio-cultural perspectives and educational challenges. This model is based on students-centered and objective-based theories. This model introduces new theory named forum theory. The mechanism and application of this model have introduced as part of this paper.

Key Words: Reforming Education, Education Model, Developing Countries

A. Background

Learning in developing countries always faces many difficulties such as economic situation of the country (Poverty), conflicts and wars, socio-cultural perspectives and political instability (Chimombo, 2005). Although these countries have been accomplished many steps to improve education by adopting systems for pioneer countries in education or developed their own system, but there are still manifold challenges and dilemmas accompanied by these developments. Learning and teaching process in developing countries must be reformed based on the economic, culture and social life in every country. This means if there are financial problems such as building schools, free education, teacher training and lack of infrastructure of education, government have to change the strategies of learning/teaching process related to the ability and possibility of achieving educations goals. The key of these solutions will be introduced as practical model in the following part of this study.

Students learning experience depends on three main elements which are curriculum, teaching strategies and assessments beside their personal abilities and other external factors (Biggs, 2003). The aim of the learning process in primary and secondary schools is to build students attitudes and characters morally, intellectually, physically, socially by acquiring some skills such as: literacy and numeracy skills, self-management skills, communication skills, social skills, thinking skills and knowledge (Hodge, 2010), while the aim of learning process in higher education is to make ready students for work (labor market) and achieving goals of good and comfortable life.

Outcomes of traditional learning are not effective anymore in the present time which is time of technology and development. Traditional learning aims to acquisition of knowledge and skills while modern learning concentrates on achieving goals and objectives of market labor, technology developments and means of comfort for human being. Curriculum, strategies, training and administration of learning have to be updated and adopting of technology is required as a solution for learning gaps in developing countries (Anderson, 2002), (Kraft, 2014). One of the solutions is to reform education by adopting student-centered learning. On the other hand, specialization of learning in the first level of education by adopting forum and minimum limit strategies. Forum strategy is based on differentiation of abilities and skills between students while minimum limit

strategy depends on encouraging and supporting talented students in any field of education. This model will introduce strategies of forum and minimum limit as an effective approach for learning in developing countries.

The aim of this model is to reintroduce student-centered learning based on the objectives of learning in every different settings of education. Every student has the choice and the opportunity to move on to the major of learning based on her/his talent, choice, eligibility and performance. At the primary and secondary school, students will be evaluated by their accomplishments and abilities in every specific major of learning. Educational supervisors and teachers are responsible for determining the major of learning based on abilities, eligibility and student's favorite choice. At high schools and upper education, students have the choice for experiencing in any field of learning based on their abilities and qualifications. Upper education required many conditions for every different major and student has to prove her/his eligibility.

B. Problems of Learning in Developing Countries

Education is the key for economic prosperity, scientific and technological development, foundation of social equity and the key of employment. There are many problems faced reforming of education in developing countries could be divided into four parts which are political, economic, socio-cultural and educational problems.

1. Political Problems

Decision-making is an important factor in development of education in every country and policies and regulations of education that made by governments shape growth and improvement of education. The problem happens when decision-makers or politicians ignore the education to won war or conflicts and this common in developing countries.

- ***Political Instability:*** it's known that public education is framed according to political agendas (Blanco & Grier, 2009). National educational policies and plans are developed based on contemporary political thought and on government interests (Popkewitz, 2000). The government plays a key role in financing education, establishing educational objectives, developing a national curriculum, managing teachers, setting student's evaluation standards and governing various aspects of educational process (WorldBank, 2004). Governments are the responsible for to provide opportunities and facilities for students, teachers and educational institutions. When there is no stability in the politic situation in the country this will impact the education system in all country.
- ***War/ Conflicts:*** based on (UNESCO, 2015) report, there are now 34 million out of school children and adolescents living in conflict-affected countries. Education is central to restore hope and a positive outlook on the future, and is a prerequisite to build resilience and to prevent violent extremism. Getting children into school doesn't result in more peace, but the right type of education can help. Conflict and violence are meanwhile destroying education systems, Conflict is taking an increasingly large toll on education systems, an education that is provided equally, with inclusive teaching and learning materials, is a powerful preventive tool and antidote for conflict. An analysis of 120 countries over 30 years found that conflict was less likely when education inequality is lower (UNESCO, 2016).
- ***Adopting and funding of Education:*** governments and politicians are the first responsible for adoption and funding education. It starts by decision of them. Education is the essential rights for every human and governments as a representative for people carry out this responsibility.

2. *Economic Problems*

- **Poverty:** poverty is the main factor that comes to mind about education in developing countries. Poverty impacts negatively the way of learning/teaching in many schools in such countries. The negative and wide-ranging effects of poverty are hard to ignore. Poverty affects economy, overburdens health care and criminal justice systems, and the ability of education system to ensure that children achieve to high levels. Poverty limits the chances of educational attainment, and at the same time, educational attainment is one of the prime mechanisms for escaping poverty. Poverty is a persistent problem throughout the world and has deleterious impacts on almost all aspects of family life and outcomes for children. In developing countries, children in poverty are at much greater risk of never attending school than wealthier children, and these differences are wide (for example, in a sample of 80 countries, 12% of children in the top quintile of household never attended school, whereas 38% of children in the poorest quintile never attended school (UNESCO, 2016).
- **Cost of Learning:** in many developing countries, students have to pay for schools while there is no income or scholarships. Cost of learning is very high comparing with the income of students or even incomes of their families. Private sector of education is very expensive and sometimes not qualified to host high number students while public sector is limited and there is still payment by students. Lack of financial support for students in undergraduate and higher education is the most problem for students where they are forced to leave education. Labor market is very limited comparing with developed countries as well (Ruytenbeek, 2013).
- **Lack of Funding:** Lack of financial resources devoted to education can be evidenced in many ways, including: lack of schools and other facilities; insufficient classrooms; insufficient, underpaid, and/or insufficiently trained teachers; lack of management and supervision; lack of and/or poor quality textbooks and other learning materials; and insufficient attention to standards and quality assurance. Each and every one of these results of insufficient funding can act as a barrier to any student seeking a proper education. External funding does contribute to the education funding gap in a number of countries, however, the EFA Global Monitoring Report (2013/14) notes that aid to education has stagnated in recent years. Donors have not lived up to the commitment that they made at the 2000 World Education Forum in 2000. UNESCO estimates the annual education financing gap at US \$26 billion. The problem of insufficient financial resources is further exacerbated by the need for sustained economic growth, particularly in poor countries, and the existence of ways and means to ensure distribution of resources including fiscal policy, tax systems and budget reforms (UNESCO, 2015).
- **Children Labor:** Child labor refers to the employment of children in any work that deprives children of their childhood interferes with their ability to attend regular school, and that is mentally, physically, socially or morally dangerous and harmful. In developing countries, with high poverty and poor schooling opportunities, child labor is still prevalent (UNESCO, 2016). In 2010, sub-Saharan Africa had the highest incidence rates of child labor; with several African nations witnessing over 50 percent of children aged 5–14 working. Worldwide agriculture is the largest employer of child labour. Vast majority of child labour is found in rural settings and informal urban economy; children are predominantly employed by their parents, rather than factories. Poverty and lack of schools are considered as the primary cause of child labour. Child labour accounts for 22% of the workforce in Asia, 32% in Africa, 17% in Latin America, 1% in the US, Canada, Europe and other wealthy nations (UNESCO, 2016).
- **Lack of Infrastructure:** many developing countries suffering of lack of educational infrastructure. The reason behind this is lack of budget of education. The quality of infrastructure has affected education outcomes in most parts of developing countries. Beside the

lack of schools comparing to high number of students, there is lack of chairs, tables, electricity, audio and video systems, trained teachers, stuff, systems and software (Chimbelu, 2011).

3. *Socio-cultural Problems*

- **Language:** learning new language is always accompanied by problems and difficulties. Students in many developing countries have to learn more than one language (native language) and sometimes they learn three or four languages at the same time. Curriculum in developing countries include at least one language during primary schools and some countries more than one, while some countries add one more language compulsory or optional in high schools (Alice Thomas, 2003). In addition to students who are studying abroad where they have to study language in a year and join regular study program in the host country. Many of these students got scholarships or cultural exchange.
- **Religion:** There is an underlying notion inside the liberal education establishment that religious belief is backwards and contrary to enlightenment. Schools have long been viewed as gateways to a glorious secular and technological future, free of religious superstition. Many countries adopted secular education where religion is not included in curriculum and students have the choice to behave as they want. In some developing countries, students have to obey for the religion extensively. Religion is not only included as a part of curriculum, but it involved in every practice and behavior in schools and out of schools (Raditoaneng, 2011). Some of developing countries teach religion more than teaching math and natural sciences. There are also some difficulties in learning based on gender and some restrictions in some countries related to religious thoughts.
- **Traditions and heritages:** in some ways tradition impact learning process negatively in developing countries such as female education, popular and cultural heritage and even education itself. There are many examples of these education problems in developing countries. For instance, lack of education culture where some families, groups or societies prefer to teach their children about work. They think education is just spending for time while their children can learn some skills from old generations easier and spend their time at work.
- **Literacy Rate:** Acquiring basic skills such as literacy and numeracy is an essential first step to enable people to act as responsible citizens of the world. Literacy rate impact education in some ways where society or educated families encourage and support their children to continue their studies as possible as they could while uneducated or less educated people encourage their children to work as possible as they can with some exceptions (UNESCO, 2015).
- **Ethnicity:** Inequality in education, interacting with wider disparity, heightens the risk of conflict. A recent study drawing on data from 100 countries over 50 years found that countries with higher levels of inequality in schooling due to ethnic and religious differences were much more likely to experience conflict (FHI 360 Education Policy and Data Center, 2015).
- **Equity and Gender Issues:** Based on the 11th annual Education for All global monitoring report, globally, almost two-thirds of illiterate adults are women, a figure that has remained almost static since 1990. If current trends continue, the poorest young women in developing countries are not expected to achieve universal literacy until 2072. Pauline Rose, the report's director, said literacy and adult education have suffered from relative neglect, as attention has focused on boosting primary school attendance rates in poor countries. Measures of progress at the national and global level often obscure deep inequalities, she added (Steele, 2006).

4. Educational Problems

- **Efficiency and Quality:** According to research by UNESCO, the UN's educational, scientific and cultural organization, suggests that 175 million young people lack even basic literacy skills. One in four young people in developing countries are unable to read a sentence, according to a report, which warns that poor quality education has left a "legacy of illiteracy" more widespread than previously believed. "Access to education is not the only crisis – poor quality is holding back learning even for those who make it to school," said UNESCO director-general, Irina Bokova, in a foreword to the 11th annual Education for All global monitoring report, which measures progress towards global goals. An estimated 250 million children are not learning basic reading and math skills, according to the report, even though half of them have spent at least four years in school. This "global learning crisis" costs developing countries billions of dollars a year in wasted education funding, it warns. Ten countries – India, China, Pakistan, Bangladesh, Nigeria, Ethiopia, Egypt, Brazil, Indonesia and the Democratic Republic of the Congo – account for almost three-quarters of the world's illiterate adults, according to the report. Many developing countries have rapidly increased their teacher numbers by hiring people without training. This may help get more children into school but it puts education quality in jeopardy, warns the report. "What's the point in an education if children emerge after years in school without the skills they need?" said Rose.
- **Effectiveness and Improvement:** there is always lack of effectiveness and improvement of learning in every level of education and this lack comes of many elements that could impact learning process. Although governments, societies, families and students themselves are in race with time to improve education and learning process, but there is still some problems related to students characters, teaching method, curriculum, teachers and principals training, administrations, support and supervision (Abdu-Raheem, 2012).
- **Teacher Training:** teachers play a significant role in learning process. There are many problems of teacher training such as working of teacher education institutions, erosion of value, structure of teacher Program, realization of constitutional goals, developing creativity, developing life skills, social issues and development of Science and technology. Aims and objectives can have achieved through the efficient teacher for an education system of its man of any society through proper education. Teacher himself in developing countries has problems such as lack of knowledge, poor academic background, inability to use ICT, Isolation of teacher's education department and Feedback mechanisms lacking (Duflo, 2012).
- **Lack of Learning Materials:** learning materials could be the books and textbooks or e-Learning materials. Many of developing countries have problem facing the lack of learning materials in schools. The appropriate funds for teaching and learning materials are not supplied; the schools are not considered, but ignored. The students will not have the opportunity to benefit from the advantage of eLearning concerning their future. Some of the challenges facing lack of eLearning materials in schools are inadequate technology infrastructure, budgets constraints, inadequate internet connection, and consideration of eLearning policies, training skills are not provided to teaching staff and lack of eLearning curriculum developers (Jennifer O'Neill, 2014).
- **Students with special needs:** The term "disabled" covers a wide range of the spectrum, including cognitive, physical, sensory, learning, speech or emotional challenges. One big problem of the current education systems in developing countries comes in the fact that the curriculum is not modified to meet disabled children's needs, causing many to get behind or even drop out. Other problem of learning in developing countries is the students who have some disabilities. According to many reasons some of them economic problems, there is very limited or no exist of schools for these students. Developing countries struggle to address the needs of their healthy

citizens, let alone those who are disabled. Without effective policies, disabled children often lack the resources they need and rarely receive a quality education. Education for disabled children is also complicated by logistical and implementation issues. There is a lack of qualified teachers and good diagnostic tests for special needs children in developing countries. Some examples of child disabilities are: learning disabled, blind and deaf, asthmatic, diabetic, suffering from HIV/AIDS and disabled due to landmines. The failure to define and respond to this population is exacerbating poor economic conditions in developing countries. One example is school drop-outs and street children (Jennifer O'Neill, 2014).

- **Non-formal education:** finally, the problems related to informal education and differences between two systems (formal and informal) of education. There are many of informal and private educational institutions in developing countries and this lead to many problems such as: lack of qualification, high number of human resource outcomes, lack of competition between educational institutions and lack of effectiveness. Informal education refers to the lifelong process, whereby every individual acquires attitudes, values, skills and knowledge from the educational influences and resources in his/her own environment and from daily experience (family, neighbors, marketplace, library, mass media, work, play, etc.) (Jennifer O'Neill, 2014).

C. Aim of Learning Model

This model aims to:

- Motivate students to learn and gain the necessary skills and experience by making available all the facilities and capabilities.
- Give student all the freedom to choose and enjoy learning in her/his favorite field without any pressure in the time and place that s/he wants based on her/his abilities.
- Save student time and efforts
- Concentrate in the aims and objectives of learning by excluding additional materials and time.
- Provide learning for each student based on her/his abilities and skills.
- Reduce the problems of learning and develop the outcomes in developing countries.
- Improve the effectiveness of learning by adopting new strategies and approaches.
- Specialization of education in beginning levels of learning.
- Make learning easier.
- Encourage students/teachers to participate as possible as they could in learning different activities.

D. Solutions for the Problems

Introducing this model is a main base for solutions of developing countries educational system's problems. The model of learning is based on the following initiatives and the supports as well.

1. Reforming Learning based on available Resources and circumstances

Sometimes, adopting developed countries systems of education or putting some ideas about the best approaches of learning without taking into considerations the limitations, lack of support and resources, unqualified human resources and many other reasons lead to Catastrophic outcomes. Reconsidering the current structure and curriculum of education is the first step to reform education. The best measurement of education outcomes is the development of society. Education reform has and continues to be used as a substitute for needed economic reforms in any country. Reform has taken many forms and directions. Throughout history and the present day, the meaning and methods of education have changed through debates over what content or experiences result in an educated individual or an educated society (OECD, 2005). Changes may be implemented by individual educators and/or by broad-based school organization and/or by curriculum changes with

performance evaluations. Although Hundreds of reforms are introduced into school systems around developing countries every year in curriculum pedagogy, governance, technology, and so on, but unfortunately, most fails to achieve the substantial improvements in student achievement. High educational expenditures don't necessarily lead to high performance. In fact, many high-performing countries have relatively modest expenditures. Every country has students with varying degrees of motivation, but the intensity of focus and time on task of students in high-performing systems is striking (UNESCO, 2017).

High-performing systems motivate their students to study hard through both intrinsic and external incentives. For instance: In Asian systems, the intense belief that effort, not ability, is the prime determinant of success, combined with the high value placed on education by families as a route to social mobility, plus the examination system, create powerful motivation. Students in Finnish classrooms are also intently engaged, but by a different means. Finnish education is rooted in ideas of discovery and self-directed learning. Teachers are extremely well-trained in this type of education. In Ontario, the focus is on individualization. The system employs student success officers, who work individually with at-risk students to create multiple pathways to graduation (Whyte, 2002).

2. International support

Developing countries needs for donation and support from international organizations. There are many organizations crosses borders and boundaries to bring quality education to every child. Responsibility of such organization is not only financed and training supports but to introduce solutions for all problems facing education in developing countries. Some of these organizations as following (Bezner, 2014):

- 1. Association for Childhood Education International:** The Association for Childhood Education International (ACEI) is a worldwide community of educators and advocates for education reform. Their mission is “to promote and support in the global community the optimal education, development and well-being of children.” To achieve this, they host the Global Summit on Childhood and the Institute for Global Education Diplomacy. The Summit invites professionals to gather and discuss issues facing children and the state of childhood, from education to health and well-being.
- 2. Education International:** A coalition of 30 million professionals in education representing 400 organizations in 170 countries and territories comprises Education International. Their goal is to promote quality education, equity in society and the interests of other education employees. As part of their campaign, they combat racism and xenophobia that prevents children from receiving a quality education. They challenge various kinds of discrimination, including exclusion on the basis of gender, sexual orientation, socio-economic status, race and ethnic origin. They also reach out to other unions and global federations whose interests include furthering global education.
- 3. The Global Partnership for Education:** The Global Partnership for Education (GPE) works in nearly 60 developing countries via a multilateral partnership that includes donor governments, international organizations and teachers. They hope to “galvanize and coordinate a global effort to deliver a good, quality education to all girls and boys, prioritizing the poorest and most vulnerable.” Along with their partners, they develop education strategies, promote collaboration in education, share solutions to challenges facing educators, finance the implementation of programs and monitor results and data to assess progress. Since its creation in 2002, the GPE states that they have aided in putting 22 million more children in school, increased literacy rates worldwide to 81 percent in 2010 and increased primary school completion to 75 percent in 2011.

Since 2004 they have trained 300,000 teachers, built and equipped 53,000 classrooms and purchased and distributed 50 million textbooks.

4. **Plan International:** Founded more than 75 years ago, Plan International is one of the oldest and largest children's development organizations in the world. Plan's ideal world is one in which "all children realize their full potential in societies that respect people's right and dignity. They aid deprived children, their families, and their communities by enabling them to meet their basic needs and building relationships to increase understanding amongst people of different cultures.
5. **Save the Children:** The goal of Save the Children is to promote global education and the rights of children around the world. To increase the quality of instruction and help ensure lasting education, Save the Children teaches effective teaching strategies to instructors and trains them to engage students. They coach parents and caregivers to help foster learning early on, and offer ways for parents to encourage schoolwork and continued learning outside of the classroom. They also hope to introduce children to artistic expression, encourage learning during and after crisis and invest in the health of children to ensure they don't fall behind. In 2012, Save the Children reached 9 million children.
6. **UNESCO:** The United Nations Education, Scientific and Cultural Organization began in 1945 and are "committed to a holistic and humanistic vision of quality education worldwide, the realization of everyone's right to education and the belief that education plays a fundamental role in human, social, and economic development." Their mission is to aid in the building of peace, eradication of poverty and lasting development. They seek to achieve these goals and create an intercultural dialogue through global education. Their membership includes 204 countries, 9 of which are associate members.
7. **UNICEF:** Established in 1946, the United Nations International Children's Emergency Fund imagines a world in which the rights of every child are recognized. Their goals include reducing inequities and discrimination, fulfilling global education goals such as the 2 Millennium Goals that focus on education, achieving gender equality and equity in education, ensuring that every child has the opportunity to learn and continuing education during and after a crisis.

3. **Government Initiatives**

Governments play an important role in improving and supervisory of education. They put the policies, planning, financial support and infrastructure of education. Compulsory education in the primary schools is also a governmental decision in some developing countries. Free education is provided by government as well. Even developing countries support education by building schools, hiring human resources, training programs, infrastructure and technology but there is still lack of this support especially in rural areas.

4. **Family Encouragement**

Families are the basic stone of student learning. Family engagement in learning process has many benefits such as: greater student achievement, student attendance is higher, graduation rates are higher, alcohol abuse is lower and students from diverse backgrounds and who are farthest behind benefit. Families are the responsible to tell students at the primary and secondary schools about the importance of learning, respecting time of school, behave well with students and teachers, Attend Extracurricular Activities, stay in touch with teachers, help to do home works and so on. On the other hand, Educators need to be willing to recognize the extent of this disconnection as a precondition for involving families in their children's education. Create a parent resource center. Provide materials on issues of concern to parents, such as child development, health and safety, drug education, special education, and so on. Include information about local parenting and social

services agencies. If possible, provide sample textbooks, extension activities, software, and audio and videotapes (Baronberg, 2014).

E. Model for Reforming Education in Developing Countries

This simple model depends on four basic strategies which are student-centered (self-directed) learning, objective-based learning, forums and minimum limit strategies.

1. ***Student-centered (Self-Directed) Learning:*** The term student-centred learning (SCL) is widely used in the teaching and learning literature. Many terms have been linked with student-centred learning, such as flexible learning (Taylor, 2000), experiential learning (Burnard, 1999), self-directed learning and therefore the slightly overused term ‘student-centred learning’ can mean different things to different people. In addition, in practice it is also described by a range of terms and this has led to confusion surrounding its implementation. The use of student-centred learning appears to be reflective of today’s society where choice and democracy are important concepts, however is it an effective approach to learning? Lea et al. (2003) reviewed several studies on student-centred learning and found that overall it was an effective approach (Lea, 2003). Gibbs (1995) draws on similar concepts when he describes student-centred courses as those that emphasize: learner activity rather than passivity; students’ experience on the course outside the institution and prior to the course; process and competence, rather than content; where the key decisions about learning are made by the student through negotiation with the teacher (Gibbs, 1995).
2. ***Objective-based (Outcomes-based) Learning:*** modern learning process relies on achievements of objectives/goals of learning rather than building abilities and acquisition of knowledge such as in traditional learning process. Outcome-based education (OBE) is an educational theory that bases each part of an educational system around goals (outcomes) (Spady, 2014) while outcomes-based learning follows the same approach where student’s goal is the base. Students that participated in the completion of the objective-based supplemental coursework were significantly more successful in fulfilling the course objectives, and had a better understanding of the material (Delgado, 2006). This strategy starts by determining the objectives of every level of education. Based on the differentiations of learning styles and institutions/schools in addition to different settings of learning itself, objectives of learning will be different as well. For instance: objective of first level of studying is to build students structure and abilities morally, intellectually and physically in addition to leaning them basics of literacy and numeracy. Learning at higher education level concentrates on achieving goals and objectives of market labour, technology developments and means of comfort for human being in addition to spreading the knowledge and solve the problems of the society.
3. ***Forum Strategy:*** This strategy is based on the establishment of five clubs in each school, university and educational institution as follows:
 1. ***Scientific Forum:*** This club includes all the subjects taught in this educational institution so that all students have the freedom to participate in this club and the freedom to choose the scientific material to be studied in a manner that is commensurate with their scientific orientation. Both teachers and supervisors have to work together, everyone in his specialized field to form this club and to select specialized teaching members.

2. **Cultural Forum:** This club includes cultural materials and everything related to intellectual and cultural creativity such as art, theater, music, poetry, literature, story, novel, short films and folk and cultural heritage of each city, region and village.
 3. **Sports Forum:** This club includes all sports and Olympic Games. It works to rehabilitate students in all kinds of sports at the local and global level. This club oversees all available and possible sports for each area and held Sports competitions at the local and international levels.
 4. **Social Forum:** students who don't have the talent or abilities to join on of the three forums (scientific, cultural and sports forum) are forced to join social club. Social club includes all social activities and volunteer work.
 5. **Innovative and excellence forum:** this club includes the most innovative and excellent students in the other clubs. This forum is like an award or prize for those students who are the best in all level of learning. This forum encourages and supports students to gain the most benefits of competition in all levels. In addition to, this forum gives students space they need for creation and exploring their abilities and dreams.
4. **Minimum Limit:** when students join one of the forums they will spend much more time to follow what they want. In another words, they will need more time to spend in studying courses they like, practice their favorite hobby or doing their favorite sport. Minimum limit strategy solves the problem of leaving other classes. Students who join on of these forums are encouraged to do the best in their forums while they could pass all the other courses. In another words, schools/educational institutions help students to have the minimum limit of required conditions to pass level of study to a new level. Students in each level have to achieve the minimum of goals and objectives of learning level which were determined by the school/ministry of education.

This strategy relies on two important methods/perspectives of learning. Student-centered learning and learning based on goals or objectives. Student-centered learning aims to develop learner autonomy and independence. Student-centered instruction focuses on skills and practices that enable lifelong learning and independent problem-solving. Student-centered learning theory and practice are based on the constructivist learning theory that emphasizes the learner's critical role in constructing meaning from new information and prior experience.

Student-centered learning puts students' interests first, acknowledging student voice as central to the learning experience. In a student-centered learning space, students choose what they will learn, how they will learn, and how they will assess their own learning. This is in contrast to traditional education, also dubbed "teacher-centered learning", which situates the teacher as the primarily "active" role while students take a more "passive", receptive role. In a teacher-centered classroom, teachers choose what the students will learn, how the students will learn, and how the students will be assessed on their learning. In contrast, student-centered learning requires students to be active, responsible participants in their own learning and with their own pace of learning.

F. Mechanism of Model Implementation

To Impalement this model, corporation and participations of all components of education are required. Every component has to play its role perfectly. Developing countries have to be aware of the continuous problems in everywhere around so there must be alternatives anytime. Maybe this model will work in developed countries and might be developed based on the environment and condition for every country but for developing countries it is necessary to gain the best benefits as possible as it could of learning based on limitations and lack of everything.

1. **Planning:** every school/institution has to put plan for implementing these strategies as possible as they could according on their budget and potentials. These strategies are not extra curriculum

or training instead it is a minimizing of time and money spending for education every year without effective outcomes. Decision must be made by ministry of education/ head of educational institution to implement these strategies and adopt them as far as they could.

2. **Infrastructure:** adoption of such strategies doesn't need to more infrastructures. Students/ teachers can use the same classes, materials, time of studying and obeying for the rules of educational institutions. All what is needed is reforming and reorganizing these classes, materials and time. For instance; at primary schools, students have 5-6 classes every day during 5-6 hours a day, numbers of classes could be reducing to 4 classes a day and students can join activities in one of the forum for an hour every day. Higher education's students can have reduced the additional and optional courses and change them with their favorite subject. Material of these forums could reorganize again by adopting from higher levels of learning.
3. **Materials:** materials of learning are available and easy to get or adopt of any educational system. Building new materials for forums is better based on the abilities for every level of study. Ministry of education has to carry out this responsibility and offer these materials as part of regular books for schools. Using technology and translations of other languages is an effective strategy.
4. **Training:** educational institutions in developing countries include many of trained teachers and stuff. Schools can use elder expertise and qualified teacher to train and teach other teachers and stuff about adopting such strategies. For example: scientific forum in high school includes all the courses taught in this level, picking up one of these courses (mathematics), there are supervisors and teachers for this subject, administration of school has to choose the qualified supervisors/teachers to train other teachers and teach mathematics in this scientific forum.
5. **Learning/Teaching:** students have the choice which forum is suitable for them. Students in primary and secondary schools are encouraged to consult with their teachers before joining these forums. Choosing process is very important and critical because based on this choice student will learn this course as hobby, duty and future career.
6. **Assessment:** the last step of implementation of this model is the assessment process. Actually assessment is continuous process and performance of administration, educators and students have to be evaluated regularly. Student's assessment has to be done by teachers and administration in addition to national assessments. Administrations and teacher's assessments have to be done by ministry of education. This assessment does not mean that teachers or schools have to give exams by using traditional methods but to help students discover and choose what fit their abilities.

G. Settings of Learning

Based on the three strategies of learning model, here are the approaches of implementation of these strategies (objective-based learning, forums and students-centered learning) in the different sittings of learning.

1. **Preschool (Kindergarten):** between (1-2 years), children at this level are asked by families to join kindergarten and supervised by schools. Kindergarten provides a child-centered, preschool curriculum for four- to six-year-old children that aims at unfolding the child's physical, intellectual, and moral nature with balanced emphasis on each of them. There is no forum at this level.
2. **Primary Learning:** this level of learning includes six years. The first three years have to concentrate in literacy, memorizing and numeracy. At the second three years, students can join one of the forums. The aim is to build strong base in student's abilities and behavior, strong base

- in literacy and numeracy and expand their understanding. There are no local or national exams in this level.
3. **Secondary Learning:** this level includes three years of learning. Students at this level are encouraged to study mathematics, science, Combined Humanities and languages in addition to other elective subjects. Joining one of clubs is compulsory and they can join one more club at the same time. The strategies (student-centered and objective-based learning) have to be implemented at this level and student has to do national exam at the end of these three years.
 4. **High School:** this level includes two years of studying. This level has to be divided into many different majors according to possible competencies of students, teachers and schools. Every student has the chance to join any major he likes regardless his previous achievement or national exams of the last level. Students have to concentrate in one major and all the other curricula or subjects are optional. Joining one of forums is compulsory and the other one is optional and two strategies (student-centered and objective-centered) are required. There are no national or local exams in this level.
 5. **Pre-University:** this level includes one year of studying. The aim of this level is to prepare students for university. Learning materials have to content only the major of studying in the related faculty or collage. Students are asked to join the same forum of high school and no need for optional forum at this level. There is a final exam determines the eligibility and competitiveness of joining universities beside the requirements of related universities.
 6. **Diploma (2-3 years):** the aim of this level is to prepare students as soon as possible for labor market. This level divided into two or three years studying. The same learning strategies have to be implemented and joining on of the forum is compulsory. Curriculum has to be focused and heavily implemented.
 7. **University (Undergraduate):** this level is the regular and formal learning in all countries and includes four years of studying. Joining forum is compulsory and students in this level have the possibilities to innovate and create their own future. The aim of this level is to prepare students for labor market and to create facilities and luxury for human being. Students-centered and objective-centered learning have to be implemented.
 8. **Higher Education:** the aim of higher education is to improve the life of people by supporting economy, create new resource for income, using natural resources effectively and so on. At this level, students-centered learning is common and recommended. There is no need for forums anymore because at this time student have to start working and use their own abilities to serve their countries.
 9. **Post-graduate:** there is only one suggestion; every postgraduate member has to join research centers. In another words, developing countries are suffering of lack of everything so, postgraduate researchers have to establish and participate in research centered. They have the ability to change the reality of their countries and they can support economy, education, decision-making and government.
 10. **Continuous Learning:** students can join their schools any time after graduation of these schools if they need for more training or information. Continuous learning is very important and current time is possible by using internet and other facilities.

H. Applications of Model

1. **Curriculum:** beside the curriculum of regular learning, another curriculum for forums is needed. In the primary learning, curriculum includes the basics of every subject and higher learning includes advanced learning while in the university and higher education has to be specific.

2. **Infrastructure:** minimizing time and regular classes is the first strategy to adopt forums. Time and place are the first factors for implementing such strategy. In addition to (in case possible), schools/universities have to include residence, restaurants, transportation, medical assurance, books and ICT tools.
3. **Administration:** Organizing time and place is the responsibility of administration in any school. In primary and secondary learning, students are asked to join forums from any grades based on their abilities and readiness. There is no restriction in age, grade and gender. While in the higher education, administration organizes time and classes for forums like regular classes in schedule of university.
4. **Teachers:** the best teachers with the best experiences and qualifications have to take the responsibility to establish and supervise forums under the administration of schools. Training teachers is one of the priorities to achieve this model because the teachers play an important role in learning process.
5. **Students:** families and teachers have to help students in primary and first stage of secondary education. Students at upper levels of learning are asked to choose what fit their hobby and abilities. Students have to follow forums till the end of their learning process. They have the choice if they want to change forum during their learning.
6. **National and International Competitions:** ministry of education or related educational administrations and head of institutions/schools have to organize and prepare for local and international competitions. Every single school/ university has to join these competitions.
7. **Technology (ICT):** it is very important that every school has to have at least one computer or more to connect to the ministry of education and other parties of education. Ministry or national institutions are the responsible about delivering educational materials, regulations, plans and national exams through the internet. On the other hand, schools/universities have to send students data and other information to ministry and government organizations. Beside the significant use and benefits of internet in learning technology could be a very effective tool for communication between all the schools and other educational institutions in one country.

I. Framework of Model

This is a framework for learning model for all different settings of learning as shown in the following figure (26).

In addition to the settings of learning, there are illustration for compulsory learning, continuous learning and forums. Level and time of joining forums are shown in the figure. There are two national exams as well and universities have the right to do more exams for every faculty.

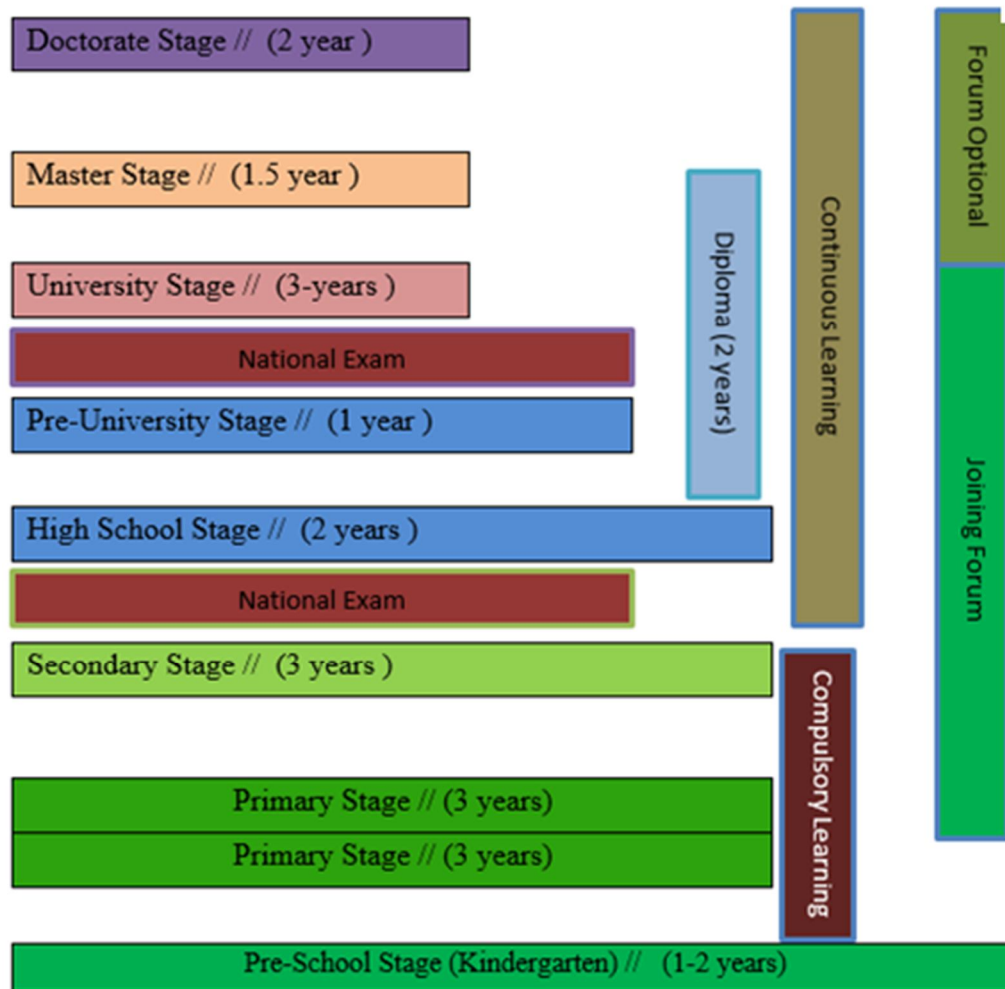


Figure 1: Framework for Model of Learning

J. Justification of Model

Every educational institution has its own method for learning. For instance, curriculum is different from public schools to private schools. More than that, some schools add some educational materials and activities more than others. These educational materials include religious courses, languages and computer science. Some schools have basic forums for talented students and other for cultural and sport activities. These forums are considered as initiative from the school under its supervision.

There are many examples of adopting forums in schools and universities in developing countries. In most cases, these forums related to secondary schools and higher education. Specification of learning in high schools and upper education is kind of forums strategies. This model is also specifying learning starting from primary schools. Students are the center of learning based on the objectives of every stage. Here are some examples to test this model:

1. **High Schools:** learning in high schools is a simple example of forum strategy. There are many different branches in high school's stage. In developing countries Students after secondary schools are asked to join one of these branches based on their qualifications and interests. These branches include scientific, literary, economic, commercial, vocational and languages sections.

There are applied and experimental sections in some countries. This kind of differentiation is an example of forum strategy.

Examples:

1. Indonesia: education system for high school in Indonesia is divided into two parts which are SMA (Senior High School) and SMK (Vocational High School). Students can choose among 47 programs of SMK which is divided in the following fields: technology and engineering, health, arts, craft and tourism, information and communication technologies, agro-business and agro-technology, business management. There were three section under these two names before they came back to current names which were:
 - SMA A (Language)
 - SMA B (Science and Nature Science)
 - SMA C (Social Sciences)
2. Jordan: Secondary education in Jordan is two years long and serves 16 to 18 year-olds. It is free and follows the basic education stage of 10 years. Secondary education is divided into two parts:
 - a. Applied secondary education: It is a practical system that prepares the student for the labor market directly.
 - b. Secondary education consists of two tracks: general secondary education track, which includes two options: scientific and literary, and vocational secondary education, which includes many professional options in the fields of industrial, agricultural, home economics and hotel.
3. **Higher Education:** learning in upper stage is a practical example of forum strategy where students could choose the major, time and courses of study in addition to additional learning materials. Universities plays role in supervision and financing such activities. Some universities have special departments for talented students to support them continue their talents and hobbies. It is obvious that regular learning in this stage doesn't require all students to join these departments. The idea of this model is to generalize this point for all students to join forums as part of their studies.
4. **Continuous learning:** away of regular learning, continuous learning is a kind of forum strategy where students after graduating still have connection to schools in case they need more classes or learning materials. Some schools are welcoming their alumni to participating in future activities and join some workshop. Students are able to join libraries and use labs at the university. In addition to, they have access to materials and courses in the website of schools by using their identification cars of related schools like current students.

Finally, the main idea of this model is to create these forums in all levels of education and to ask every student to join at least one of these forums where s/he could follow her/his hobby or talent. Joining these forums is compulsory in primary and secondary levels and optional in upper levels of education. Beside basic learning for students in primary schools, there is forum to encourage and support every student to be successful and more effective in serving community.

K. Conclusion

This model introduced a new approach for learning based on three strategies which are: objective-based learning, students-centered learning and forums. Learning process has changed and traditional learning is not effective anymore. Specification, innovation and excellence are the aims of modern learning. Students now have the chance to embark on the space of science and knowledge without limitations. This model opens the doors and eases the difficulties for students to achieve their goals.

This model is designed for improving learning and its outcomes in developing countries according to limitations and lack of income and infrastructure of education. Problems of learning in developing countries have been mentioned in the beginning of model and the solutions of these problems start by adopting such model and some other factors to help adoption of the model. This model may work in any learning system in the world by modifying some elements that based on economic and educational limitations. Some of developed countries use the same strategies individually in their educational institutions.

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