Literacy and Adult Education Based on Community Development in Accordance With the Sustainable Development Goals

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ABSTRACT
The present study aims to the overall goals that is mitigation and adaptation of women to life in various settings with well-being with the Special goals: a. Empowering women scientifically, technically, and economically. b. Changing the nutritional culture pattern and making use of the available nutritional sources. c. Learn about investment methods and marketing methods. d. Learn about the natural resources of the region to benefit from its products. e. Raising the economic level by learning the income generating skills. This research using qualitative method that analyzed the images of applying the Reflect methodology during skill training. Curriculum implementation methods is REFLECT methodology, Introduction to Literacy and Social Change, a translation adapted from the word REFLECT, which is an abbreviation of: “Regenerated, Frierean, Literacy, through Empowering, Community Techniques”. The result shows that the learner accepts this type of education as it is related to his special needs and previous knowledge and enjoy the way of teaching to get away from the traditional. The scientific subject is related to community issues and production, a creative Groups based on knowledge and science is created, and there is possibility of generalizing the method to both Males and Females and all local, regional and global regions.

Keywords: Literacy, Adult Education, Community Development, Sustainable Development Goals.

1. INTRODUCTION

Community development Based Education is a distinctive educational model that relies heavily on modern learning theories, It is an alternative to teacher-led memorization and classroom, as students are busy investigating pressing problems within their social context that culminate in actual outcomes.

This type of learning has many advantages for implementing these strategies in the classroom including greater depth of conceptual awareness, a broader knowledge base, improved communication and personal and social skills, enhanced leadership skills, increased creativity, and improved writing skills.

Producing projects for the curriculum is not new, nor is it an intellectual revolution in education. John Dewey was one of the first to advocate the idea of “learning by doing” in his famous article entitled My Pedagogical Creed And in it he clarified his beliefs regarding education, saying: “The teacher is not in school to impose certain ideas or to form specific habits in students, but he is there as a member of society that helps determine the paths that should affect the student and helps him to respond appropriately to these influences, so I trust In what are called expressive and constructive activities as a center for establishing mutual relations.

Then educational research developed this idea of teaching and learning in a methodology known as “project-based learning", and these studies proved that students in the classrooms that adopted project-based education had higher degrees than students in traditional classrooms.

It is a general term for the practices of civil activists, concerned citizens, and professionals that aims to build stronger and more resilient communities.

Community development seeks to empower individuals and groups by giving them the skills they need to make an impact in their societies. Usually, these skills are created by forming large social groups working to implement a public agenda. Workers in

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community development have developed over the years a set of skills and approaches to interact within communities and in particular with disadvantaged peoples. An example is this: Less formal educational methods and community organizing and teamwork skills. Since the sixties and seventies of the twentieth century and through various anti-poverty programs in both developed and developing countries, those involved in community development have been affected by structural analyzes related to the causes of deprivation and poverty, which means inequality in the distribution of wealth, income, land, etc., and in particular inequality in political power and the need to Mobilizing manpower to bring about social change.

In 2000, under the United Nations, world leaders set eight development goals for the new millennium, to be achieved by the end of 2015, aimed at eradicating poverty and hunger, universal primary education, gender equality, reducing child mortality, improving mental health and combating the virus. (AIDS) ensure environmental sustainability, and forge a global partnership.

Many countries achieved most of the Millennium Goals, especially the goal on poverty and hunger, as the number of people living in extreme poverty decreased from 1.9 billion in 1990 to 836 million in 2015. Developing countries saw significant improvements in the areas of health, education, gender equality and the empowerment of women. They are lofty and integrated goals and targets that are indivisible and strike a balance between the three dimensions: economic, social and environmental.

- In August 2015, 193 countries agreed to the following 17 goals:
  - No to poverty: Ending poverty in all its forms everywhere.
  - No to Hunger: Ending Hunger, Achieving Food Security, Improving Nutrition, and Promoting Sustainable Agriculture.
  - Good health: ensuring a healthy life and promoting well-being for all of all ages.
  - Quality Education: Ensure inclusive and equal quality education and enhance lifelong learning opportunities for all.
  - Gender equality: achieving gender equality and empowering all women and girls.
  - Clean and healthy water: ensuring abundance and sustainable water and health management for all.
  - Renewable energy at affordable prices: Ensuring access to modern energy at affordable, reliable and sustainable rates for all.
  - Good jobs and economy: Promote sustainable, inclusive, developing economic growth, full and productive employment, as well as decent work for all.
  - Innovative and good infrastructure: Build a resilient infrastructure, promote inclusive and sustainable industrialization, and foster innovation.
  - Reducing inequality within and between countries.
  - Sustainable Cities and Communities: Making cities and human settlements inclusive, safe, resilient, and sustainable.
  - Responsible use of resources: ensuring sustainable consumption and production patterns.
  - Climate action: Urgent action to combat climate change and its impacts.
  - Sustainable oceans: the conservative and sustainable use of oceans, seas and marine resources for sustainable development.
  - Sustainable land use: protect, restore and promote the sustainable use of terrestrial ecosystems, sustainable management of forests, combating desertification, halting land degradation and restoration and stopping biodiversity loss.
  - Peace and Justice: Promoting peaceful and inclusive societies for sustainable development, providing access to justice for all and building effective, accountable and inclusive institutions at all levels.
  - Partnership for sustainable development. Strengthening the means of implementation and revitalization of the global partnership for sustainable development.

Figure 1 Sustainable development goals

1.1. The future of education and sustainable development

Since the early seventies, serious efforts have been made in the Arab world that have produced many experiences, including experiences adopted by organizations at the international, regional and local levels such as the International Educational, Scientific
and Cultural Organization (UNESCO), the Arab Organization for Education, Culture and Science (ALECSO) and the Islamic Educational, Cultural and Scientific Organization (ISESCO) And the Arab Bureau of Education for the Arab States of the Gulf. Perhaps the study carried out by the Arab Bureau of Education to explore the future of education in the Arab Gulf states is aimed at reforming education and seeking to link and document the relationship between education and sustainable development, and this study concludes with the following indicators to link education with work, which are:

1) The introduction of practical and technical studies in general education programs in its various stages, which are activities that do not aim at productive purposes as much as they aimed to awaken the professional awareness of students, find pictures of the integration of academic education with practical experiences, and link education to productive work, and this trend did not work because it was not taken seriously from the students.

2) The rise in technical education beyond the secondary school represented by the technical colleges that were introduced by the United Arab Emirates and the experiment is still subject to evaluation in front of the challenges and mechanisms of the labor market and its changes. Therefore, in order to create a close relationship between education and sustainable development in the near future, the following ideas, proposals and recommendations must be taken into consideration:

a) The organic linkage between education and development, which leads to harmony between programs and curricula taught in general education, higher education institutions and universities.

b) Establishing a workforce planning council in the Arab countries to formulate plans and link education with human development needs, development requirements and the labor market.

c) Eliminate the bureaucracy in the ministries of education, and adopt the principle of centralization of planning, the centralization of implementation, with the aim of accelerating educational development in the field and the school

d) Emphasizing the unity of knowledge, its integrity, and its function, so that the student realizes the link between the experiences he acquires inside the classroom and the laboratory with the applications and life practical skills of all those experiences, and enhancing the culture of production and appreciation of the work.

e) Confirm the development of creativity, logical scientific thinking, capacity development, communication skills, critical thinking, problem-solving, decision-making, and avoidance of memorization, stereotyping, and stereo-type thinking.

f) Managing public education on an economic basis and seeking to set appropriate standards to measure its returns, in light of the high cost of education, and the difficulties facing its financing, and raising its internal efficiency to eliminate the negative phenomena of waste and leakage.

g) Enhancing the functional relationship between education and training in production institutions, with a tendency to develop evaluation systems to emphasize and focus on measuring the learner's ability to what he can accomplish, and to acquire the principle of self learning through training students on scientific research and exploration skills, to create a learner community that strives to develop His knowledge, skills and energies, in light of the successive rapid changes in life and the labor market.

h) Providing the best of technology in the educational opportunities, helping students to develop high and distinct capabilities, and mastering achievement competencies at international levels and standards.

i) Inclusiveness of development for all elements and inputs that make up general education, foremost of which is the teacher, mentor, curriculum, teaching methods and assessment tools, and attention to life long learning methods.

j) Reconsidering higher education institutions and universities, in terms of their goals and functions.

k) Strengthening the relationship between universities and production institutions, to provide training opportunities for students in work environments, thus contributing to the private sector in bearing the burden of education.

l) The focus of universities, scientific research institutions and centers on conducting applied research (Action Researches) to meet the needs of productive institutions, and the development of a comprehensive long-term strategy for applied research.
m) Developing programs and curricula in universities, and restoring programs required for development and changes in labor market mechanisms.

n) To direct admission to higher education institutions and universities.

o) Attention to applied and technical higher education of first and third class professionals and technicians.

p) Consciously taking into account the experiences of the advanced industrial countries, being compatible with our Arab environments.

q) Attention to environmental sciences and resources, and outreach operations to give students values and skills and deal with them.

r) Create a kind of participation and integration between higher education institutions and universities in the Arab countries in the field of human power development, so that Arab labor can be replaced instead of Asian labor.

s) Establishing national accreditation and quality assurance bodies in the ministries of higher education in the Arab countries, to verify the overall quality and programs offered by universities in order to develop them and make them more compatible with the needs of sustainable development.

1.2. Structural theory in education

Contrary to what was prevalent in the past, we find modern theories saying that real education will not be based on what the learner heard even if he memorized it and repeated it in front of the teacher. Rather, these theories, including constructive theory, confirm that the person builds information internally affected by the environment surrounding him, society and language, and that each learner has a way and privacy in understanding the information and not necessarily be as the teacher wants. So, the teacher’s involvement in sending information to the learner and confirming and repeating it will not be useful in building the information as he wants it in the learner’s mind.

1.3. The foundations and principles of learning in structural theory

1) The individual builds knowledge within his mind and does not transfer it to him in full.

2) The interpretation of the individual what he receives and builds the meaning based on his information.

3) The society in which it lives has a major impact on building knowledge.

4) Education is inseparable from the developmental development of the relationship between the subject and the subject.

5) Reasoning is a condition for constructing the concept: the concept is built only on the basis of inferential conclusions that derive its material from action plans.

6) Mistake is a condition for learning: since error is an opportunity and a situation by overcoming it, knowledge is built that we consider to be correct.

7) Understanding is a necessary condition for learning.

8) Learning is associated with experience, not education.

9) Learning transcended and denied the disorder.

10) One of the most prominent theorists of this theory (Jean Piaget).

1.4. Concepts of structural education theory

1) The concept of adaptation: Learning is the adaptation of an individual's membership to the data and characteristics of the physical and social environment by incorporating them into functional categories and transformations.

2) Adaptation: It is a change in the responses of the self after absorbing the data of the situation or the subject towards achieving balance.

3) Comprehension and appropriateness: Comprehension is the incorporation of the subject into the structures of the self, and appropriateness is the appropriateness of the self with the external subject data.

4) The concept of procedural process: All degrees of development and abstraction in knowledge grow in dialectical concomitant, and they are all based on the basis of procedural processes, i.e. practical and concrete activities

5) The concept of representation and symbolic function: The representation of Jean Piaget, is nothing but the cognitive map that the thought builds on the world of people and things, by means of symbolic function such as language and symbolic play.

6) The concept of representation and symbolic function: The representation of Jean Piaget, is nothing but the cognitive map that the thought builds on the world of people and things, by means of symbolic function such as language and symbolic play.
7) The concept of action plans: The calligraphy is a structured behavioral model that can be used intentionally, and it represents an important practical intelligence after the starting point of the practical action that governs the kinesthetic phase of mental development.

1.5 Community-centered curriculum designs

There are many forms of designs centered around the community, that is, that make the community social situations, problems and issues the focus of their attention, and the following is a brief introduction to each of them.

Curriculum Based Design of Life:

- Signs of this curriculum design emerged from Herbert Spinnen (1885), who suggested an interest in helping learners to tackle issues of primary concern and identified it as follows:
  1) Self-care directly in terms of health.
  2) Indirect self-preservation by satisfying other needs, such as food, shelter, and clothing.
  3) To play the role of good motherhood and good fatherhood.
  4) Preparing good citizenship.
  5) Making use of free time in peaceful ways.

Thus, thinking about a systematic design focused on social life issues and preparing the teacher in an educational way through these situations, from the logic of looking at the school as a small society that reflects what is revolving around it in the society of problems, events and social issues.

This systematic design takes many and varied names, such as:

- Social activities curriculum.
- Social problem approaches.
- Life functional approaches.

Generally and whatever the nomenclature, this curriculum draws its experiences from the reality of life in the local community and presents them in a functional way that serves the community’s issues and problems in order to study them scientifically, and in a way that helps learners to participate positively in facing them in order to achieve “the interest of the community.”

2. METHOD

Curriculum implementation methods is REFLECT methodology. Introduction to Literacy and Social Change, a translation adapted from the word REFLECT, which is an abbreviation of: “Regenerated, Freirean, Literacy, through Empowering, Community Techniques”. Its content means generating literacy in a free way by enabling local community techniques (methods / mechanisms).

Ferreri, a Brazilian educator, sparked the revolution among literacy workers from the 1960s until he died in 1996. As he criticized the method of literacy based on the educational book in which the teacher fills the minds of learners with words and information and this is called the banking concept of knowledge, where the teacher is spent from his cognitive reserve. He deals with them as ignorant people with no knowledge, forgetting their long experience in life, and he says about that (We have to learn from them and if we refuse to do this we cannot teach them). Freire sees learning as (awareness) and illiterates who live in a world of silence are aware of the reality of their lives. The literacy process is a research and creativity process that develops participants' awareness of their rights and can change their community.

The way to see this, Freire, is that the participants depart slightly from their daily practices to see them in a new way through the coding process (image or drawings) that expresses the problems and contradictions that surround their lives ... where they begin with the description that expresses the drawing and then analyzes the problem in depth and seeing the truth and this analysis calls it Ferrari decodes and considers that dialogue is essential to this analysis, produced by the participants and the facilitators, allowing the episode events of new understanding and new awareness.

Freire sees:

1) The importance of linking illiteracy eradication with analysis processes, and he says that there is no benefit in eradicating illiteracy if it does not help out of the world of silence. The word itself is a point that focuses on the participants’ dialogue, then breaks up the words into the syllables that compose them, then breaks the words into their letters and their voices, and Freire sees that this process returns to (awareness) that starts from the verb to a new verb and this mobility that results in social change.

2) The methodology also starts from a new approach to development. It is a portal to vaporization of rural participation, and this approach starts from the level of life the community lives in and stands before the beginning to choose the tools that help to prioritize the targets themselves and in simple ways.

That this approach believes that the use of well-known tools such as the referendum in setting development priorities are tools that take a long time
and that they contain the opinions of others and not those who are directly targeted.

The portal believes that societies, whatever their civilization level, possess an inexhaustible wealth of strategies, techniques and norms that made them continue their lives for centuries despite the harsh environment and sometimes poor sources.

All that the entrance needs is techniques that help the simple illiterate to accumulate and refine their knowledge to be a base from which to start development.

"Chambers" is considered the first to establish the roots of this approach after reviewing the axes that Paolo Freire put on, awareness and money of important influences in social change and saying that the entrance of "Tamer" depends on a set of techniques that depend on the method of participation and thus meets in terms of Philosophy with community development method, Paulo Freire's philosophy of social change and participatory research style as it relies on analysis by grassroots.

Society culture in the REFLECT methodology represents a positive social force, because despite the obstacles that dominate the simple classes, we find it able to initiate effective actions based on their existing knowledge and beliefs. Freire reserves confidence in the knowledge of the illiterate and their beliefs, but at the same time it raises the importance of actual capacity, and Chambers stresses the importance of starting in development programs from the knowledge of people and their beliefs and the portal has developed tools that help to participate.

Development, as Dans says, is not a Jewellery Neckles that gives to those who need it, but rather a series of processes that the public has the dominance in achieving its goal. He says that the focus should be on the awareness and the actual forces that they possess. That development takes place through multiple processes of change and includes controlling nature and benefiting from its data, production and people's behavior. Thus, we find that development goals and strategies reflect the value of society, its beliefs and goals and its members are supposed to be able to take the decision. And Grain says "The primary purpose of education is to raise awareness of the alternatives that lead to the desire to change and use information with understanding and move the process from providing an ideal education from the beginning to giving an opportunity for participants to choose and decide for themselves.

The methodology has developed many techniques based on the idea that the embodied visual objects help to participate and the starting point must be participation in a collective illustrative design (maps - drawings - calendar – matrix, etc) on the ground and using available local materials.

A brief introduction to the comprehensive literacy project for women in science and technology (a model based on Education Based Community Development): The project was implemented by the UNESCO Chair for Women in Science and Technology at the Sudan University of Science and Technology in seven states (Red Sea - West Kordofan - North Kordofan - South Darfur - North Darfur - Gedaref - Kassala). 7430 women and girls benefited from it.

**Project name:** The comprehensive science and technology literacy project for women.

**Project founder:** Professor Al-Shafa Abdal Gadir Hassan.

**Project axes:**

1) Knowledge-based literacy with the REFLECT program.
2) Technical literacy.
3) Nutritional culture.
4) Financial Literacy (Community Entrepreneurship Program).
5) Feminist skills.
   Agricultural and animal production.

**Project goals:**

1) The overall goal: Mitigation and adaptation of women to life in various settings with well-being.
2) Special goals:
   a) Empowering women scientifically, technically, and economically.
   b) Changing the nutritional culture pattern and making use of the available nutritional sources.
   c) Learn about investment methods and marketing methods.
   d) Learn about the natural resources of the region to benefit from its products.
   e) Raising the economic level by learning the income generating skills.

**Target group:**

- First stage: Facilitator training.
- University and high school graduates.
- The second phase:
- Train women from the community’s rules on literacy and manual female skills.

**Field of courses implemented:**
3. RESULT AND DISCUSSION

3.1. Scientific paper instrument

According to the researcher following the qualitative method, she analyzed the images of applying the Reflect methodology during skill training as follows:

1) The pictures in Figure 2 show the letters on cards in order to install them in words and sentences, according to the accompanying activator, and the synthesis method is used in teaching and Reflect method is centered on the learner, who works to teach and learn himself.

2) This photo in Figure 3 shows the share coinciding with the fish and shells manufacturing program: Sea Words, the source, fish and shells, which are the products of the sea.

3) The picture in Figure 4 shows the daily needs of the learner - lentils - onions and coffee. The lesson was linked to mathematics.

4) A picture in Figure 5 showing the income and the outgoing tree, given that it is the woman who manages the family's economic affairs - she writes words in the medium and uses natural materials, then converts them to letters, and other words consist of them.

5) Since coffee or Al Gabana, as the general Sudanese people call it (a basic drink in Sudan), discuss the pros and cons of Al Gabana and take advantage of free time, draw on the medium, and women make Al Gabana, write the words and transport the Booklet in Figure 6.

6) The photo in Figure 7 talks about the types of foods available and their ingredients, and they are transported in the booklet after inserting them in sentences.
3.2 Female income-generating skills.

1) Figure 11: Home farming and healthy food.

Figure 11 Home farming and healthy food

2) Figure 12: Cultivation of medicinal and aromatic plants.

Figure 12 Cultivation of medicinal and aromatic plants.

3) Figure 13: Hand Made.

Figure 13 Local handmade products

4) Figure 14: Food processing

Figure 14 Local food processing

5) Figure 15: Leather tanning and leather manufacturing

Figure 15 Leather manufacturing

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**Figure 7** Food’s ingredients

7) The photo Figure 8 talks about the daily practices of family members and is taught in a discussion manner.

**Figure 8** Daily activity

8) The picture in Figure 9 covers a lesson in the Prophet’s biography, and numbers 1-10 are taught with the rosary as an Islamic symbol.

**Figure 9** Prophet’s biography

9) An image in Figure 10 showing a map of natural resources in the region.

**Figure 10** Natural resources
6) Figure 16: Waste recycling

![Figure 16 Recycling product](image)

4. CONCLUSION

The learner accepts this type of education as it is related to his special needs and previous knowledge. Enjoy the way of teaching to get away from the traditional. The scientific subject is related to community issues and production. Create a creative Groups based on knowledge and science. The possibility of generalizing the method to both Males and Females and all local, regional and global regions. Based on the result, it can be recommended that: Mainstreaming the REFLECT methodology for all literacy and adult education centers. Adding the Reflect methodology as a course for the colleges of education program in the basic stage. Training of male and female primary school teachers on education based on community development.

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