

"Project Pedagogy According to John Dewey: Concept, Principles, and Steps"

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Abstract:

The project method is a prominent example of active education that aims to activate students' mental and physical abilities by practically involving them in the most important topics that concern them, their environment, and their community. Students realize this and work on the problems contained in those raised topics through the problem-solving method adopted by Dewey as a scientific approach in education, starting with observation, making assumptions, and working on verifying them procedurally. Thus, the project method can translate the scientific steps into a progressive educational methodology. Therefore, in this study, we will attempt to address the concept, characteristics, principles, and steps of the project according to John Dewey.

Keywords: Pedagogy; Project Method; Project Pedagogy; John Dewey.

INTRODUCTION

The school represents an effective laboratory for educational ideas and the social environment capable of producing genuine democratic individuals, helping to create habits, and opening up enthusiastic horizons that work towards spreading peace, democracy, and economic stability.

For Dewey, the school is not just a place to fill minds with information and experiences from previous generations but rather a social institution aimed at establishing a strong relationship between the youth and society. It is those activities that have the most impact on the student and utilise their unique abilities for social purposes, calling for the school to become a community where the spirit of democracy flourishes, serving as a higher moral example by fulfilling the

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psychological demand for continuous growth and the social demand.

Teaching methods are among the most important technical processes that combine both theoretical and applied aspects, following systematic procedural steps that facilitate learning. There are various methods, such as dialogue, discussion, role-playing, and others. In addition, there is the project method, considered the best method from the pragmatist perspective advocated by John Dewey in the educational process. What is the project method? What are its principles, characteristics, and steps?

Concepts of the Study

1.2. Pedagogy:

Language: A term derived from Greek meaning the science of education. (Fili & Al-zaki, 2003) defines it as a term composed of "ped," meaning child, and "agogie," meaning leadership and guidance, that is, directing and leading children. As a term, G. Berger sees it as "a set of methods and means that enable us to assist students in transitioning from childhood to adulthood." Labret views it as "a science of applied humanities that enables the educator to assist the educated in developing and expanding their personalities." (Khaled, 2004). The concept is frequently found in the psychology encyclopaedia, where it is stated that "pedagogy is a set of techniques, methods, and steps that distinguish teaching a specific subject (the art of teaching), such as the pedagogy of reading, mathematics, or expression. It distinguishes between a fundamentally active activity that must be stimulated in the learner (pedagogy of discovery) and a specified entry representation in educational practice (pedagogy of objectives). It is a practical view of educational situations, especially the school, which invites, through understanding reality, intellectual preparation for readings, projects, and works required by education." (Abdelssalam, 2003).

2.2.Project:

Language: The term "project" is mentioned in the Arabic language, where it is stated: "The water entered (shar') and the animals started drinking from it." (**Ibn Mansur, 1301 AH**). The term "project method" is associated with the American educator W. Kepatick, a student of the educator and philosopher John Dewey. The roots of the method extend to:

- In the 18th century, there was a serious interest in studying children and the emergence of a psychological movement in education, especially with Jean-Jacques Rousseau (the French philosopher), who advocated the use of projects for the adolescent stage in his book "Emile."

- Pestalozzi, who introduced education of things and senses over words and sayings.

- Herbart emphasises the necessity of caring for inclination, desire, and interest during the upbringing and education of the child, where the learner is drawn to perceive new meanings that he gains and interprets in the light of his previous experience associated with them.

- Froebel and Montessori, who adopted play as a method in the educational process, At first, Kilpatrick defined the project as "quiet effectiveness applied in a social field within the scope of the school." In 1921, Kilpatrick revised this definition, considering the project as "any unit, activity, or experience with internal motivations directed towards a specific goal." Abdullah (1984).

The Terminological Définition :

In general, a project is an aim one seeks to achieve; it is intentional thinking, with its subject being an action or activity with a timeframe in which it is realised, usually in the future. In the educational field, it refers to systems aimed at meeting learning-related needs.

A project is a life-connected work based on a specific goal, which

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may be an individual or collective activity following sequential and defined steps. (Shannan & Hegrsi, 2009).

A project is a series of activities undertaken by an individual or a group to achieve clear purposes, allowing the learner to fully engage in building their knowledge by interacting with their surroundings. There are various definitions of a project, including:

- The project serves as a plan or organised method with a specific goal, whether by the teacher in their class, the principal in their school, or the educational researcher. It involves independent studies and creations related to various units within the curriculum.
- The project is a temporary effort undertaken to create a service, product, or unique result, representing a specific task intended to be achieved and accomplished.
- The project strategy aims to connect learning in school education with the life experiences of learners both outside and inside the school; in other words, to link the school environment with the social environment, applying practical formats to activities.

3.2. Project Pedagogy:

An educational approach that places the learner or group of learners in a position to express desires and personal needs, pose questions, and formulate aspirations, then embody them practically. This pedagogy "extends active methods that enable learners to demonstrate their actual cognitive capabilities." (Ministry of National Education, 2005).

Project pedagogy holds significant importance due to its various functions, including:

- Sensory-motivational function: where the learner is placed in an educational situation of significance, enabling them to understand the goals of the educational process and become more engaged in the educational act.

- Educational function: utilising acquired knowledge and desired competencies in project accomplishment.

- Social function: participating actively in the completion of projects with a social nature, where the learner obtains formation, preparing them to engage in civic life (in the future) as a mature citizen. **(Ministry of National Education, 2005).**

- 1.Fostering cooperation among students and activating their mental capacities such as intelligence, memory, and imagination.

- 2.Enhancing the importance of teachers exchanging expertise in completing tasks.

- 3.Producing tangible outcomes reflecting the potential and actual cognitive and behavioural knowledge of learners.

- 4.Training on a variety of tasks where each student contributes to task completion.

- 5.Practicing harnessing acquired practical knowledge, building competencies, and acquiring new learning. **(Ministry of National Education, 2005).**

4.2..John Dewey:

John Dewey was an American philosopher and educator born in Burlington in 1859. He attended school and then joined the University of Vermont, later specialising in philosophy and education. He obtained his Ph.D. in philosophy from Johns Hopkins University in 1884. He worked as a philosophy professor at the University of Michigan from 1889 to 1894, then as an education professor at the University of Chicago from 1894 to 1904. He founded the first experimental school and headed the philosophy department at Columbia University, where he was appointed a professor. He also made several trips abroad, visiting England and Italy in 1904, Turkey in 1924, and Mexico in 1926. He passed away in 1952, leaving behind many works, including notable ones such as "Democracy and Education," "Education in the Modern Age," "Experience and Education," and others. (Antonio, 1964).

3.Genesis of Project Pedagogy:

In the second half of the 20th century, calls from reformers arose, urging consideration of learners' interests and needs and making the learner the focal point of the educational process. All teaching revolves around the learner, leading to the emergence of new pedagogies where the learner is active and the teacher is a guide. The roots of this approach extend to Jean-Jacques Rousseau (1712–1778), who advocated the use of projects for adolescence in his book "Emile" (1762). It was further developed by Pestalozzi (1746–1827), who advocated for education based on sensory things rather than words and language alone.

This pedagogy is associated with the name of the educator and philosopher John Dewey (1859–1952), who proposed the project as a teaching technique in 1947. According to him, school is a miniature part of social life where the child gains experience and values by participating in society. Renewal in schools aims to make them a reflection of social life. Thus, he called for schools that suit society and, under new education, became a social institution resembling the reality and importance of a child's life at home, in their immediate environment, or in the playground where they play.

This pedagogy is linked to Jean-Ovide Decroly (1871–1922), who advocated for adopting a focus on achieving interconnection between subjects. This approach was further supported by the emergence of constructivism, founded by the works of Bruno, Piaget, Vygotsky, etc., emphasising that self-learning is achieved only when the child is aware of their capabilities and confident in their ability to take personal initiative. This promotes their independence and self-guidance, making real-life practice possible, as schools are not just preparing for life but are life itself. This reference is concerned with the nature of knowledge and the role of the learner in its construction, granting a fundamental role to the learner in the process of acquiring knowledge, thus becoming the result of internal construction performed by the learner. This reference evolved into social constructivism, where learning occurs with others to build knowledge using cognitive

conflicts between a group of students and the teacher.

The role of constructivist theory in learning is also significant, as it calls for a gradual construction of knowledge through organisation and structuring based on tasks accomplished by the learner, with the teacher intervening to train learners on employing their strategies.

4. Foundational Theories for the Project Method:

1.4. Constructivist Theory:

Among the pioneers of this theory is "Jean Piaget," who believes that knowledge is produced through actions inferred by the learner. Therefore, attention is directed towards the active role that learning plays in their learning process, and these understandings are built in the mind based on prior experiences, with these understandings taking on new meaning and utility when employed. The constructivist theory is based on three premises:

- Epistemologically, construction is done by the learner and is not given.
- In cognitive psychology, it relies on mental processes (mental walks) involved in learning rather than on stimulus and response. It analyses the mental mechanisms involved in building new knowledge.
- In pedagogy, it includes strategies that the teacher employs to assist students in building their knowledge.

2.4. Social Theory:

Among its pioneers is the Russian researcher "Lev Vygotsky," who analyses the role of cognitive mediation in cognitive development, highlighting the importance of cognitive mediation provided by the teacher between the two parties in the educational process (the learner and knowledge). However, this does not mean that the social theory considers knowledge construction to occur solely through social interaction, which plays an active role in developing learners' mental readiness. Supporters of the social theory believe that social interaction

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plays a significant role in building cognitive tools, and engaging in new social interactions is more sophisticated than previous ones.

5.Principles of Project Pedagogy:

1.5.Focus on the Learner's Nature:

The target of the educational/learning process is the learner, considered the starting and ending point as the main axis around which the educational/learning process revolves to achieve social objectives.

2.5.Principle of Self-Activity:

The learner constructs their knowledge themselves and engages in self-activity to acquire knowledge, thus learning through personal experience and participation.

3.5.Principle of Learning through Practice:

The learner is an active element in the learning process, and the principle of experimentation is fundamental. Search, experiment, reflect, live the experience, discover, infer, and learn from what is experienced...

4.5.Principle of Negotiation:

Negotiation has legitimacy as a form that gives learning a place and respects its role in participating in the construction process. Thus, authority in the classroom becomes shared, with the teacher relinquishing part of their authority and becoming receptive to criticism and suggestions. The negotiation process occurs between parties (learners and teachers), negotiating the choice, objectives, stages, and mechanisms of project accomplishment.

5.5.Principle of Contract and Progressiveness:

Commitment to executing the task within specified deadlines within the framework of collaboration with others develops learners' sense of responsibility. The project is dynamic as it is adjustable and subject to revision, aligning with the reality of the present to build the future, aiming to achieve results, leading to the establishment of dynamics.

6. Project Objectives:

- Increase learners' motivation by relying on themselves and demonstrating their abilities, inclinations, and questions.
- Enjoy cognitive independence, where learners take responsibility for their education and develop their mental habits.
- Improve academic achievement levels, with learners exhibiting high levels of thinking.
- Establish interconnection and integration between various academic subjects while aiding the connection between real-life and academic material.
- Diversification of assessment: The project method reveals the capabilities of students and teachers who apply the project method and allows them to get to know their students' conditions more than what traditional pen-and-paper tests offer them. Projects presented to them by some students, who may perform poorly in achievement tests or class participation, stand out in return.
- Scientific and Intellectual Differentiation: Some high-achieving students present modest projects and follow various assessment methods that provide comprehensive evaluations of students, highlighting their diverse capabilities beyond just academic achievement.
- Alleviating Anxiety: In project-based learning, students have the freedom to construct sentences without fear of making mistakes, thus helping to alleviate anxiety.
- Learner as Teacher: When a student presents their project in class, they become a small teacher, explaining ideas to their peers, boosting their confidence in themselves and their classmates.

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• Characteristics of Project-Based Learning:

- Meets learners' needs, preferences, and interests, which vary with changes in the environment. Projects differ from one school to another and even within the same school over time, as they should stem from learners' desires, suggestions, and contributions.
- Supports integration across subjects, meaning subjects aren't taught in isolation but may overlap, allowing students to learn and utilise various subjects without strict boundaries.
- Facilitates social relationships among learners through group work, fostering collaboration, assistance, and appreciation of each other's efforts, both within and outside the school environment.
- Enhances cognitive and practical skills by requiring hands-on activities, contributing to the holistic development of learners.

• Advantages of Project-Based Learning:

- Promotes teamwork and collaboration, as seen in group projects, and fosters healthy competition in individual projects.
- Centres the learner in the educational process, with the learner choosing and executing the project under the guidance of the teacher.
- Prepares learners for real-world applications of theoretical knowledge, encouraging them to translate theory into practice and engage in productive work.

Encourages organised research both inside and outside the classroom.

- Familiarises learners with cooperative learning, where each contributes according to their abilities.

- Allows for individual differences to emerge.

- It instills curiosity, responsibility, and self-confidence in

learners.

- Encourages learners to bridge the gap between theory and practice.

7.Project Method Limitations:

- Difficulty in implementation due to separate curricula and numerous subjects.
- Requires extensive resources in terms of financial means, meeting review requirements, tools, equipment, etc.
- Lack of organisation and coherence in the method often leads to projects branching out in various directions, resulting in shallow and irregular experiences.
- Overemphasis on granting freedom to students and focusing the educational process around their interests, neglecting social values and cultural orientations to chance alone.

8.Project Steps:

1.8.Stage Project Selection Phase:

The selection of projects, which means determining the topic, is not a simple matter but rather the most important step that should be carefully considered by the discerning minds of educators because its success depends on the soundness of the choice, which in turn reflects proper thinking and paves the way for success, contributing to the development of expertise to the fullest extent. Therefore, the project is chosen based on the reality of the learners and the problems they feel and are interested in, which should be carefully considered by the educator, creating a situation from reality that instills doubt and questioning through engaging with expertise to provide successful responses that serve the learners. The standards that should be focused on in identifying the problem from which the project is launched include (Abdelhafid, 2009-2010).

A. Project Alignment with Learners' Interests and Objectives:

If "Colbatrik" derives the standards for the project method in teaching from the fundamental principles laid down by Dewey for the teaching method, and if he adopts the steps Dewey outlined for logical thinking, then as his student, he criticises traditional methods in education for relying on the imposition of expertise on students. These are the methods by which educators view subjects like geography and mathematics with ready-made expertise, far removed from the circumstances of learners and their inclinations. Colbatrik considers that the first step in the correct method must stem from the work resulting from the learner's enthusiastic activity, and the interaction between his activity and the means he uses must be observed. Here, Dewey's analogy of this to what scientists do in a laboratory gives us pause. **(John, 1946).**

The educators' interest is not limited to the learners' benefit in this society, because Dewey's educational goal for raising children is to develop their abilities "so that they can benefit from their special abilities and from their society to the fullest extent possible" **(John & Everlyn, 1962, p. 286)**. This is achieved by creating activities that align with their interests.

John Dewey calls for the necessity of stimulating students' thinking on topics, with the stimulation being "presenting something new, something that allows room for doubt and questioning" **(John & Everlyn, 1962)**. This enables the teacher to identify the type of problem each project involves based on specifications that consider learners' inclinations and emerge from their interests. Thus, every successful project stems from the educator's distinction of the correct problems, which students can engage with and are inclined towards, stimulating them to interact with them. These are not problems of the teacher or the textbook but are learner problems arising from their experiences, and the educator works to harness current expertise to assist them in dealing with these problems.

On this basis, projects that align with learners' interests become a means and a tool to introduce them to the changing world they live in and prepare them to navigate it without directing or shaping their future with predefined images. The closer projects and associated activities are to learners' interests, the more they express themselves naturally and freely, without external coercion imposed on them, as was the case with traditional methods. (Al-Ahawani & Dewey, 1968, p. 50).

B. Project Handling:

An Important Aspect of Learners' Lives (Abdelhafid, 2009-2010) It may arise from the students' interests and inclinations, but it does not necessarily represent a problem that directly affects their lives. Therefore, the educator's expertise must intervene, which should be put at their service, and they should work to engage their interests so that they can demonstrate to them the important aspects that should be focused on. For example, students may wish to emulate the lives of Eskimos. This desire prompts the teacher to identify aspects related to Eskimo life that are important to the learners, whether related to agriculture, geography, or urbanisation, so that they can benefit from what they have historically engaged with as knowledge and, socially, economically, and scientifically, through their conceptualization of solutions to their problems. (Kawthar, n.d)

Therefore, every project that arises from students' interests and addresses an important aspect of their lives is on its way to success because it contributes to their acquisition of experience that helps them in their real-life situations. In this regard, Dewey says, "Every curriculum that acknowledges the social consequences of education must prepare conditions that affect community life so as to develop observation, information, insight, and social concerns" (John, 1946). Thus, a project that addresses an important aspect of students' lives motivates them to raise their academic level among their peers and helps them serve their environment. Therefore, these factors must be considered in the project presented to students to arouse their interests and address important aspects of their lives.

C. Project Contribution to Increasing Learners' Experiences:

The educational value of the project depends on the experiences it generates for the students, which indicate their growth, rather than just the abstract results of rote learning and stuffing, which often undermine education and limit learners' development. If the practical project in which students engage relates to how to obtain yoghurt, the teacher should not directly give the complete plan to the students to achieve the desired result, as this exceeds the students' capabilities. The goal is not the results, as it was in traditional education, but the real aim is to develop students' talents and experiences. Therefore, they are left to their inclinations and capabilities to discover the correct plan to achieve the desired goal of the project, which is obtaining yogurt. In this way, students' experiences expand and help them in their lives because they stem from their inclinations and reflect their mental level. Students work on bringing the milk themselves, heating it on the fire, then cooling it to a certain degree and leaving it in a warm place, adding the yeast, and then leaving it to ferment and preserving it in the refrigerator. (Kawthar, n.d)

The teacher's role here remains to monitor the students' work and provide feedback that helps them overcome their mistakes and leads them to the right path so they can reach the correct method of producing yogurt. In the case of providing guidance-oriented methods, students may achieve the desired result, but they do not gain the experience that remains entrenched in their minds and helps them in their real lives. Therefore, the goal of the project is to increase experience, not just to achieve results, and the same applies to other subjects. If projects are related to geography, the desired goal is to "increase the ability to perceive spatial and natural relationships" (John, 1946). If terrain, water, rivers, and country locations and boundaries are studied as information that begins and ends within those limits, it becomes unfamiliar information that stresses students learning it. However, if they are studied as tools to expand the horizon of experience so they can become familiar with unknown people and things, it becomes more beneficial (John, 1946). The same applies to history, mechanics, biology, and

others.

Therefore, project-based work is undertaken to expand and continue experience, and this is what made Dewey emphasise that education for experience through it and in its path is the greatest benefit in education (Al-Ahawani & Dewey, 1968, p. 170).

D. Project Balance, Diversity, and Suitability with Students' Levels and Abilities:

The effectiveness of the project depends on considering the students' level by harnessing the teacher's expertise, which encompasses the project's details on the one hand and assessing the learners' level on the other. Projects that do not suit the students' level cannot benefit them, but conversely, if the projects are suitable for their level, their initiative in undertaking them increases, and thus their experiences increase.

Therefore, students from the same group may resort to undertaking similar projects to gain experience after completing the main project they were engaged in, such as turning to soap-making after completing a perfume-making project. This means that the acquired experience from one task contributes to another equivalent task. This is what should be available in the projects undertaken by students so that their experiences expand and diversify, as advocated by John Dewey. He emphasised the necessity of cohesion and continuity between the experiences gained, so that the desired experience from a scientific project related to the subject of science extends to educational experiences related to other projects related to history, geography, or physical education.

The principle of continuity of experience in education means that each experience draws something from past experiences and adapts the experiences that come after it in a certain way (John, 1954). Balance and integration occur in the formation of experiences, and the successful educator is the one who knows the value of the project he offers and works to stimulate his students to do diverse projects through what they gain from their experiences. They work to employ them to acquire new

experiences from new projects that are interconnected with the projects they are engaged in. They resemble a hearty meal that includes all elements in an integrated manner without one element overpowering the other. These projects serve to enhance growth in all aspects—mental, psychological, ethical, social, and political—among learners.

E. Considering the Project in Light of School Conditions and Feasibility:

When a teacher chooses a project, regardless of the subject it relates to, they must ensure the availability of the resources required for the projects, or what the learners need when undertaking those projects, so that these requirements are available in the school and accessible. This precaution, which must be taken into account, should precede the initiation of any project so that the teacher and students are not surprised by the inability to carry out the project while they are in the process of completing it (Abdelhafid, 2009-2010).

In this regard, the school, as a proponent of progressive educational curriculum and representing the image of a progressive school, should spend on projects that are within its financial reach and practically beneficial. This is considering that what learners accomplish through projects serves the public interest, starting from the school and ending in social life because the educator there does not just train the students but develops them for proper social life (Al-Ahawani & Dewey, 1968, p. 175). However, excessive spending on a particular project affects other equally important projects. Thus, the teacher can consider all the circumstances surrounding the project and their students who are about to implement it (Abdelhafid, 2009-2010).

The stage of choosing the project requires a comprehensive view from the educator of their students' abilities and inclinations, as well as their understanding of the events occurring in social reality. It means having a coherent and adequate experience from a comprehensive view of human nature and environmental conditions, accompanied by sound scientific thinking that facilitates scientific steps, starting with

identifying the problem as a starting point for action and activity (Mahrous, 1988).

2.8.Stage of Project Planning:

After selecting the project and clarifying its purpose and objectives, students, under the teacher's supervision, develop a plan to achieve those goals. This planning includes the following steps:

- Discussion of the chosen project while identifying individual and group activities that suit it and are at the level of learners' inclinations and capabilities. (John & Everlyn, 1962) pointed out, each lesson plan should be considered a distinct experience with a predefined goal that excites the child and makes it appealing to them.

- Identification of the skills necessary for the project, drawn from the educator's experience, whose function in progressive education is to create optimal learning conditions and select the most suitable experiences for teaching. The teacher understands the needs and interests of the students, devises goals, and selects the means to engage them in activities to acquire suitable skills that make them comfortable and develop their abilities (John, 1946). Consequently, a successful educator can incorporate both project selection and students' skills required during execution based on experience, which is an essential condition for them before the learners.

- Discussion of obstacles and difficulties that learners may encounter during the work through anticipations that the educator should be familiar with due to their experience. These difficulties are generally related to how students use the provided resources, and the teacher should assist them in handling them properly. Regarding the intended objectives of the project, they are assessed based on the learners' interactions and alignment with the activities and skills presented to them. All these aspects fall under the teacher's supervision, who evaluates everything deemed unsuitable by reactivating the learners' activities towards improvement. Therefore, all these potential hurdles that may arise should be planned for before starting the work so that everything learners do during the project remains under the

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teacher's oversight, regardless of the emergencies that may arise.

- During project planning, the teacher must prioritise the development of students' acceptance of others' opinions and respect for them as a primary goal of every project, regardless of its nature. This is achieved through planning that emphasises exercising the right to express and defend opinions, accepting criticism constructively, not being biased towards a particular opinion, and allowing learners to acquire democratic principles. The goal set by John Dewey for progressive education is to create a democratic society. Therefore, the project serves as a way of life for democratic life in society, as it connects the learner to their environment. Thus, the teacher should cultivate them during discussions and promote free thinking.

- The teacher should also consider the need to divide learners into groups based on the expected activity aspects. Each group should examine a specific aspect of the project before starting the implementation. Each group should be able to record its activities clearly, and the reports submitted by the groups outline the necessary plan for project execution. The teacher adapts this plan based on their observations of the students' preferences and skills. (**Kawthar, n.d**)

Based on that, we can envision any study topic that can be adopted as a project completed by students according to their levels and the classes they belong to. The educator can pique the interest of their learners in how to cultivate certain plants, raise fish, manufacture household tools, and more by developing a plan that involves distributing the work among the students, conducting group discussions to choose the location for the selected work, explaining theoretical knowledge by the teacher to assist students during their tasks, and detailing the project procedures agreed upon by the students among themselves under the supervision of the teacher, who encourages and motivates them. These are the most important details of the plan that can be easily envisioned if they stem from the learners' interests. The planning stage is the stage of contemplation and represents the theoretical aspect of the project, and it is of great importance to both the

educator and the learners because it reflects the active and collective spirit of the students when they outline their desires and specify their inclinations towards the work they will undertake freely. At the same time, the educator can prepare the means that suit what the students have revealed as interests to engage in the activities they have chosen in this project, which helps them to execute what they desire sincerely, thereby demonstrating all their mental and physical capabilities. (Abdelhafid, 2009-2010).

3.8. Project Implementation Stage:

After setting the planning stage in accordance with the mentioned conditions, comes the implementation or application stage, which takes the project from the theoretical level to practical application. It is the stage of actual activity where learners gain experiences and develop their skills, and each learner engages in the work they selected themselves in the previous stage. Allowing students to engage in hands-on work within the school through handicrafts is considered a great aid to them, supervised by the teacher, who should remain observant of their work, maintaining their interests continuously. (John & Evelyn, 1962, p. 124) The skills demonstrated by the students during their work should be noted by the teacher, and any errors they may make should be pointed out to alert them only as they learn to overcome them themselves because correctness that follows error earns the correct experience and establishes it, and the process continues in the same way with all groups. Moreover, during the activity, the educator can teach the students some ethical and social virtues that develop their sense of responsibility, democracy, and cooperation while adhering to what was outlined in the previous plan for project execution, as it genuinely reflects their concerns and should not be changed except when necessary, requiring adjustments based on the learners' preferences. (Kawthar, n.d) For example, students may design a plan to build a house using drawing scales, then work together to implement it practically according to the designed plan. Here, it is evident that project-based learning connects different subjects through the diversity of knowledge and tools used.

4.8.Evaluation Stage:

This stage should accompany every step of the educational process, as it is a continuous process that allows identifying errors and necessitates individual interventions to ensure the highest chances of success. Therefore, evaluation in the project method should encompass all psychological and skill aspects of the learner, as well as include the educational resources used, in a manner that the teacher deems appropriate to inspect the project work thoroughly to identify necessary improvements. Thus, evaluation methods may vary from one step to another and even within the same step, as the teacher sees fit. For example, oral or written questions may be posed or scenarios presented based on the teacher's experience to highlight what the student has acquired and how to apply it. Alternatively, reports prepared by students may be reviewed, periodic reports revisited, and so forth. The evaluation should include the following:

- Assessing the experiences acquired by the learners and related to the skills obtained or other experiences used, resulting from reviewing the works of others, identifying the difficulties encountered by the learners during their work in each stage of the project, presenting the methods followed to overcome them, as well as the success or failure of those methods. (**Kawthar, n.d**)

- Identifying deficiencies in the resources used, determining the reasons for their shortage, and making suggestions to avoid shortages and errors in future work based on the levels of the learners and the classes to which they belong. (**Kawthar, n.d**)

9.Conclusion:

John Dewey laid down a set of conditions to ensure that educators do not confuse thinking as an educational method, thus avoiding reliance on the errors of the traditional curriculum, characterised by a lack of scientific activity, among other shortcomings. Dewey's aim in progressive education was to develop experience by creating a connection between educational activities and the learner's

surroundings, tailored to their abilities. Therefore, Dewey's approach relied on the scientific method, calling for active participation in the educational process, where learners engage in activities to develop their abilities and broaden their experiences. He aimed to make learners adaptable to societal changes, possessing a democratic spirit by providing opportunities for all. This led Dewey to advocate for reliance on student materials, subjects, and methods of activity. This is the main distinguishing feature of this teaching method, as it places significant importance on manual work, project-based learning, and the new educational curriculum that relies on critical thinking and the scientific method. Dewey built upon cognitive experience and intelligence so that educators could achieve the goals he outlined, undoubtedly aimed at building a society that keeps pace with.

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