Research Design

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Abstract:

The word design has numerous meanings . But in connection to the subject concern, it is an outline of research project's procedures . It is the term of essential components of a study that supplies fundamental guidelines of conducting the study. The research design is similar to a wide plan or model that clarifies how the whole research project will be conducted . It is , in other words , a framework of research methods and techniques selected by a researcher to conduct a study . An effective research design concentrates on factors such as the nature of the study problem , ethics , and controls peculiar variables . It permits the researcher to systematically answer research questions or test hypotheses .

Key words: (Research design, features of research design, need and importance of research design, and types of research design).

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الملخص:

كلمة تصميم تمتلك معاني عديدة ولكن عند الأقتران بموضوع البحث فهي عبارة عن مخطط لإجراءات مشروع البحث . هي عبارة عن مصطلح للعناصر أو المكونات الأساسية للبحث والتي تزود خطوط أساسية عن كيفية القيام بالبحث أو الدراسة . تصميم البحث مشابه لخطة واسعة أو نموذج والذي يوضح كيف أن مشروع البحث سيتم تنفيذه . هو بعبارة أخرى أطار مفصل لطرائق البحث والتقنيات أو الأساليب والتي يتم اختيارها من قبل الباحث للقيام بالبحث . تصميم البحث الفعال يركز على العناصر مثل طبيعة مشكلة البحث ، أخلاقيات البحث العلمي ، السيطرة على المتغيرات الغريبة . هو يسمح للباحث بان يجيب بشكل منهجي أسئلة البحث أو يختبر الفرضيات .

الكلمات المفتاحية: (تصميم البحث ، مميزات تصميم البحث ، الحاجة والأهمية لتصميم البحث ، وأنواع تصميم البحث)

1. Introduction

1.1 Meaning of Research Design

A research design can be considered to be as a procedural framework that is used by the researcher to form or unite the different elements of the study in a consistent and systematic way in order to find answers to research questions . It is also taken to be as the set of methods adopted by the researcher to collect and analyze measures of the variables determined in the problem of the research under study . Different textbooks give different definitions on research design .

Kothari (2004: 31) defined research design as the arrangement of conditions to collect and analyze data in a manner that purposes to gather relevance to the research aims with economy in procedure.

A research design is a plan , structure and strategy of exploration or probing so as to get answers to research questions or problems . The plan is the entire scheme or program of the research . It includes an outline of what the researcher will do from writing the hypotheses and their possible answers to the final analysis of data . (Kerlinger 1986:279).

A traditional research design is a blueprint or detailed plan for how a research study is to be accomplished , practical variables so they can be measured , selecting a sample for the study , collecting data to be adopted in an objective way for testing hypotheses , and analyzing the results . (Thyer 1993: 94)

1.2 The Important Features Of A Research Design

Kothari (ibid: 32) has stated the following features that must be available in every research design:

- 1 . It's a plan that designates the sources and types of information applicable or appropriate to the research problem .
- 2. It is a strategy designating which approach will be utilized for collecting and analyzing the date .
- 3 . It is also includes the time and cost money since most studies are conducted under these two conditions .

1.3 Need and Importance Of Research Design

Kothari (ibid) points out that research design has a vital role in any research since it facilitates the different research procedures and operations , thereby making research as effective as possible giving fruitful information with less effort , time and money . For example , in building a house , the owner will need a blueprint or what is called (the map of the house) well thought and designed by a professional architect, similarly the researcher needs a research design or a plan to make his / her research comes true . Research design requires before anything planning of the adopted methods used in the process of collecting and analyzing data , keeping in view the objectivity of the research and the availability of staff , time and money . The building up of the research design should be conducted with great care as any simple mistake in it may spoil the whole project . Research design , actually has a great effect on the degree of the reliability of the outcomes arrived at and as such shapes the firm base of the whole construction of the research project .

The research design helps the researcher to regulate his / her ideas in a frame whereby it will be easy for him / her to look for flaws and inadequacies . Such a design can be given to others for the purpose of commenting and

critical evaluation . In the absence of the such an action, it will be troublesome for the critic to supply an inclusive review of the research under study .

1.4 Types of Research Design

A researcher must have an inclusive understanding of the different types of research design to select which type of designs is suitable for the implement of the study. Different classifications of research design are given by different authors as illustrated in below:

1.4.1 Kothari's Classification of Research Design

Kothari (ibid: 35 - 52) demonstrated the following types:

1 . Exploratory Research : Exploratory research studies are also called formulative research studies . The main purpose of those studies is that of formulating a problem for more exact investigation or of developing the working hypotheses from a practical consideration . The most emphasis in such studies is on the exploration of ideas and insights . As such the research design equivalent for such studies must be flexible enough to give opportunity for the possible different aspects of a problem under study . Flexibility in research design is required since the research problem , defined at first , is changed into one with more exact meaning in exploratory studies , which fact may predestine changes in the research procedures for collecting relevant data .

2. Descriptive Research: Descriptive research studies are those studies

Which are aimed to describe the characteristics of a particular individual, or of a group, whereas diagnostic research studies define the frequency with which something occurs or its connection with something else. The studies concerning whether specific variables are connected, are examples of

diagnostic research studies . On the other side , studies concerned with certain predictions , with narration of facts and results about the characteristics of an individual , group or situation are all examples of descriptive research studies . The majority of the social researches comes under the umbrella of this denomination . In this type of research designs , the researcher has to be able to define vividly , what he wants to measure and must find appropriate methods for measuring it along with an obvious definition of ' population ' he wants to study . Since the objective is to obtain complete and adequate information in the said studies , the procedure to be used must be precisely planned . The design in such studies must be rigid and not flexible and must shed light on the below :

- (a) Formulating the aim of the study (what the study is about and why is it being conducted?)
- (b) Designing the approaches and processes of data collection (what techniques of collecting data will be utilized?)
- (c) Choosing the sample (how much material will be required?)
- (d) Gathering the data (where can the needful data be found and with what time period should the data be completed?)
- (e) Manipulating and analyzing the data.
- (f) Reporting the conclusions.

Thus , the research design in state of descriptive studies is a comparative design concentrating on all the points above and must be conducted taking into consideration the aims of the study and the resources obtainable .

3. Hypothesis _ testing Research: Hypothesis _ testing research studies are also called experimental studies. The main purpose of those studies is to test the hypotheses of causal relationship between variables. Such studies need procedures that will not only minimize bias and maximize reliability, but will allow drawing deductions or conclusions about causality. Usually experiments fit this requirement and the design of the research in those studies entirely depends on experiments. Experimental designs are classified into two sub_types , they are informal experimental designs and formal experimental designs. Informal experimental designs are those designs that usually adopt a less complicated form of analysis situated on differences in magnitudes, whereas formal experimental designs display relatively more control and utilize accurate statistical procedures for analysis. These two sub types are also divided into main important types as illustrated in below:

3.1 Informal Experimental Designs are:

- **3.1.1** Before and after without control design: In such a design a single test group or area is adopted and the dependent variable is measured before the presentation of the treatment. The treatment is presented and the dependent variable is measured again after the treatment has been presented. The impact of the treatment would be equivalent or equal to the scale of the phenomenon after the treatment minus the scale of the phenomenon before the treatment. The main weak point of such a design is that with the passage of time significant peculiar variations may be introduced in its treatment impact.
- **3.1.2** After only with control design: In such a design two groups or areas (test area and control area) are adopted and the treatment is presented into the test area only. The dependent variable is measured in both the areas simultaneously. Treatment effect is evaluated by subtracting

the value of the dependent variable in the control area from its value in the test area . The main assumption in such a design is that the two areas are analogous with respect to their behavior towards the phenomenon taken . If this assumption is not correct , there is the possibility of peculiar variation introduced into the treatment impact . Anyhow , data can be gathered in such a design without the intervention of problems with the passage of time . In this consideration the design is superior to the former design (before and after without control design) .

3.1.3 Before and after with control design: In such a design two areas are adopted and the dependent variable is measured in both the areas for an identical time _ period before the treatment . The treatment is presented into the test area only , and the dependent variable is measured in both for an identical time _ period after the presentation of the treatment . The treatment impact is clarified by subtracting the change in the dependent variable in the control area from the change in the dependent variable in test area . This design is outstanding to the above two designs due to the fact that it avoids peculiar variation resulting both from the passage of time and from non _ comparability of the test and control areas . But at times , because of the lack of historical data , time or a comparable area , the researcher has to prefer to choose one of the first two informal designs demonstrated above .

3.2 Formal Experimental Designs are as following:

3 . 2 . 1 Completely randomized design: This design involves only two principles, the principle of replication and the principle of randomization of experimental designs. It is the simplest design and its procedure of analysis is very easy. The important feature of this design is that topics are haphazardly

assigned to experimental treatments (or vice _ versa) . For example , if we have 14 topics and if we wish to test 7 under treatment A and 7 under treatment B , the haphazard process will give every group of 7 topics selected from a set of 14 an equal opportunity of being assigned to treatment A and treatment B .

- **3.2.2 Randomized block design:** In this design the principle of local control can be applied along with the other two principles of experimental designs. Topics are first divided into groups, known as **blocks**, such that within each group the topics are relatively symmetrical in respect to some selected variables. The variable selected for grouping the topics is one that is believed to be correlated to the measures to be acquired in respect of the dependent variable. The number of topics in a given block will be equal to the number of treatments and one topic in each block will be randomly assigned to each treatment. Generally, blocks are the levels at which the researcher holds the peculiar factors fixed, so that its contribution to the whole variability of data can be measured. The main advantage of this design is that in each treatment appears the same number of times in each block.
- **3 . 2 . 3 Latin square design :** This type of experimental research design is used frequently in agricultural research . The conditions under which agricultural investigations are accomplished , are different from those in other studies due to the fact that nature plays a vital role in agricultural fields . For example , an experiment has to be made through which the impacts of five different varieties of manures on the yield of wheat , are to be observed . In such a study the varying manure of the soil in different blocks in which the experiment has to be carried out , must be taken into account ; otherwise the outcomes obtained may not be very dependable due to the output happens to be the impact not only of manures , but it may also be the impact of

manure of soil . Similarly , there may be the impact of varying seeds on the yield . To solve this problem , the **Latin square design** is used when there are two main peculiar factors such as the varying soil manure and varying seeds .

- **3.2.4 Factorial designs:** Factorial designs are utilized in experiments where the impacts of varying more than one factor are to be specified. They are specially significant in several economic and social fields where usually a large number of factors influence a specific problem. Factorial designs can be of two main types:
- (1) Simple factorial designs: In case of simple factorial design, the researcher consider the impacts of varying two factors on the dependent variable, but when an experiment is conducted with more than two factors, the researcher uses complex factorial designs. Simple factorial design is also called as a (two - factor - factorial design), whereas complex factorial design is called as a (multi factor factorial design). In this design the peculiar variable to be controlled by homogeneity is termed the control variable and the independent variable, which is operated, is termed the experimental variable. Then there are two treatments of the experimental variable and two levels of the control variable. As such there are four cells into which the sample is divided. Each of the four collections would supply one treatment or experimental condition. Topics are selected at random to each treatment in the same way as in a randomized group design. The means for different cells may be gained along with the means for different rows and columns .Means of different cells symbolize the means scores for the dependent variable and the column means in the given design are named the main impact for treatments without taking into consideration any differential impact that is because of the level of the control variable. On the other side,

the row means in the said design are named the main impacts for levels without attention paid to treatment.

- (2) Complex factorial design: Experiments with more than two factors at a time include the use of complex factorial designs. A design which considers three or more independent variables at the same time is termed a complex factorial design. In case of three factors with one experimental variable having two treatments and two control variables, each one of which having two levels. Factorial designs are utilized mainly due to two important advantages:
- (1) They provide appropriate accuracy with less effort and as such are a source of economy. Using factorial designs, the researcher can determine the main impacts of two (in simple factorial design) or more (in complex factorial design) factors (or variables) in one single experiment.
- (2) They allow numerous other comparisons of interest . For instance , they provide information about such impacts which cannot be acquired by treating one single factor at a time . The specification of cooperation effects is possible in state of factorial designs .

1.4.2 Creswell's Classification of Research Design

Creswell (2012) listed the following types of research designs:

1 . Experimental Designs: Creswell (2012 _ 294) illustrated that in the experimental design the researcher tests an idea (or practice or procedure) to specify whether it effects an outcome or dependent variable. The researcher has at first to decide on an idea with which to experiment, appoint individuals to experience it (and have some individuals experience something

different) , and then specify whether those who experienced the idea carried out better on some outcomes than those who didn't experience it .

The researcher utilizes an experiment when he / she wants to set up possible cause and effect between the independent and dependent variables. This means that the researcher attempts to control all variables that effects the outcome expect for the independent variable. Then, when the independent variable effects the dependent variable, in this case we can say the independent variable caused or possibly caused the dependent variable. Since experiments are controlled, they are the best solutions quantitative designs to use to set up probable cause and effect. For instance, if the researcher compares one group that experiences a lecture method and another group that experiences discussion method, he / she controls all of the factors that might impact the result of high scores on a quiz . The researcher has to make sure that personal abilities and test conditions are the same for both groups, and he / she must give both groups the same questions. The researcher controls for all variables that might impact the result expect for the difference in types of directions (lecture or discussion). The researcher also use an experiment when he / she has two or more groups to study.

2 . Correlational Designs: Creswell (ibid: 337) stated that correlational designs supply an opportunity for the researcher to predict scores and explain the relationship among variables. In correlational research designs, the researchers use the correlation statistical test to describe and measure the average of correlation or association between two or more variables or groups of scores. In this design, the researchers don't attempt to control or manipulate the variables as in an experimental design; instead, they are using the correlation statistic, two or more scores for each person, for

example , a student motivation and a student achievement score for each individual .

A correlation is a statistical test to clarify the tendency or pattern for two or more variables or two series of data to vary consistently . In the state of only two variables , this means that two variables share popular variance , or they co — vary together. Co — vary means that the researcher can predict a score on one variable with knowledge about the individual's score on another variable .

The researcher conducts this design when he / she seeks to relate two or more variables to see if they effect each other, such as the relationship between teachers who accept developmentally suitable practices and their use of the whole - language approach to reading directions . This design permits the researcher to predict a result, such as the prediction that ability, student motivation, school infrastructure, and academic semester effect student achievement. This design also permits the researcher to know and apply appropriate statistical knowledge based on calculating the correlation statistical test. Although a correlation is a statistical test, this research has divided into two main primary types or forms: explanation and prediction. An explanatory correlational design explains or demonstrates the level or degree of association among two or more variables at one point in time . Researchers are interested in whether two variables co - vary , in which a change in one variable is inverted in changes in the other. An example is whether motivation is correlated with academic performance. on the other side, a prediction design gives the researcher the opportunity to identify the variables that will positively predict a result or criterion. In this type of research, the researcher utilizes one or more predictor variables and a criterion (or a result) variable. A prediction allows the researcher to predict future performance, such as whether a student's GPA (grade point average) in college can be forecasted from his or her high school performance (ibid: 359).

3 . **Survey Designs**: Survey research designs can be defined as procedures in quantitative research in which researchers administer a survey to a sample or to the whole population of people to describe the attitudes , behaviors , opinions , inclinations , or characteristics of the population . In this procedure, survey investigators gather quantitative , numbered data using questionnaires or interviews and statistically analyze the data to describe trends about replies or responses to questions and to test research questions or hypotheses . They also explain the meaning of the data by relating the outcomes of the statistical test back to past research studies .

Survey designs are different from experimental designs in that they don't include a treatment given to contributors by researchers . Since survey researchers don't experimentally manipulate the conditions , they cannot interpret cause and impact as well as experimental researchers can . Instead , survey designs describe trends in the data rather than give accurate interpretations . Survey studies have much in common with correlational studies . Survey investigators often correlate variables , but their attention and focus is directed more toward learning about a population and less on correlating variables or forecasting results , as is the core in correlational study . Survey designs play a vital role in education . The researcher uses this type of research designs to describe trends , such as society interests in school bond or state or national trends about obligatory students' uniforms , also it can be used to determine individual opinions about political issues , such as whether students need a choice of school to attend . Survey studies permit the researcher to identify important beliefs and attitudes of individuals , such

as college students' beliefs and opinions about the teaching staff. Survey studies provide valuable information to evaluate programs in schools, such as the use of robots in science education (ibid: 376).

Creswell (ibid: 405) pointed out that survey studies are divided into two main types or forms: a cross – sectional study and a longitudinal study. Cross – sectional studies are used to assess information at one point in time and they are of various types. They can:

- (a) examine recent attitudes, beliefs, practices, or opinions.
- (b) compare two or more educational circles in terms of attitudes , beliefs , practices , or opinions .
- (c) assess social needs for educational services.
- (d) be utilized to evaluate programs.
- (e) be utilized in every part of a governorate or nationally to survey many contributors across a large geographic area .

Longitudinal studies may assess changes over time with trends of a population , changes in a cohort group or subpopulation of a population, or changes in a panel of the same participants or individuals over time .

4. Grounded Theory Designs: A grounded theory design is a systematic, qualitative procedure utilized to produce a theory that demonstrates, at a wide conceptual level, a process, an action, or an interaction about a constant topic. In this type of research design, the theory is a process theory which interprets an educational process of accidents, activities, actions, and interactions that take place over time. Also, grounded theorists progress through systematic procedures of gathering data, identifying categories,

associating these categories , and shaping a theory that interprets the process

The researcher uses grounded theory when he / she needs a wide theory of explanation of a process . Grounded theory produces a theory when existing theories don't identify the problem or the contributors that he / she plans to study . Because a theory is grounded in the data , it gives a better explanations than a theory that is available immediately and does not need to be specially made to fit a specific purpose , grounded theory suits the situations , in fact works in practice , is sensitive to contributors in a setting , and ,may resemble all of the complicated issues found in the process . Also the researcher uses this type of research design when he / she wishes to study some processes , such as how students develop as writers or how high — achieving African American and Caucasian women's careers proceed . It is also used to interpret and explain actions of people , such as the process of contributing in an adult education class , or a communication among people , such as the support department chairs supply for college researchers (ibid : 423) .

Grounded theory research design is divided into three types or forms of designs , the systematic procedure design of Straus and Corbin (1998) included using predetermined categories to interconnect the categories , visual diagrams , and particular suggestions or hypotheses to make the connection apparent . The emergent design , consistent with Glaser's (1992) ideas , depends on discovering a basic social process without prearranged categories . The constructive approach of Charmaz (2000) concentrated on subjective meanings by contributors , apparent researcher values and beliefs , and suggestive or tentative inferences (ibid: 443) .

5 . Ethnographic Designs: The word ethnography literary means " writing about collections of people". In using this qualitative design, the researcher can identify a set of people, study them in their homes or workplaces, observe how they act, behave, think, and speak, and develop a general description of the collection.

Creswell (ibid: 462) states that ethnographic designs are qualitative research procedures for depicting, analyzing, and explaining a culture – sharing group's shared styles of behavior, beliefs, and language that proceed and develop over time. The focused element of this definition is culture.

The researcher conducts this type of design when the study of a collection or a crowd supplies understanding of a larger issue . Also , this design is conducted when the researcher has a culture – sharing group to study – one that has been together for some periods and has developed shared values , beliefs , and language . Ethnography design can also be used to supply a detailed day – to – day description of events and accidents , such as the thoughts and activities of a search committee employing a new principal , also it can be used when the researcher has a long – term access to a culture – sharing group so that he / she can construct a detailed register of their behaviors and beliefs by the time , the researcher can be a contributor in the group or simply an observer, but he gathers extensive field notes, makes interviews with many people, and gathers letters and documents to set up the register of the culture – sharing group .

Ethnographic research designs are divided into three main types or forms: realist, case studies, and critical studies. A realist study is an objective study of a culture — sharing group. It is written in the form of a third — person viewpoint, reports on the information learned from contributors, and places

the investigator in the function of providing the final explanation and presentation of the culture .

Case studies concentrate on a program , event , or activities and supply a detailed depiction and analysis of a case rested on extensive data collection . A critical ethnography is a form of ethnography in which the investigators advocate for groups degraded and marginalized in the society and concentrate on matters such as power and authority (ibid: 481).

6 . Narrative Research Design : The concept " narrative " comes from the verb " to narrate " or " to tell " (for example , a story) in detail (Ehrlich et al . 1980 : 442) . Creswell (2012 : 502) demonstrated that in narrative research design , investigators depict the lives of individuals , gather and tell stories about people's lives , and write narratives of individual experiences . As a discrete form of qualitative research , a narrative actually concentrates on studying a single individual or person , collecting data through the collection of stories , reporting person experiences , and discussing the meaning of these experiences for the person .

The researcher utilizes this type of research design when has individuals willing to tell their stories and he / she wants to report their stories . For educational staff looking for personal experiences in real school sittings , narrative research presents practical , specific insights . By using narrative studies , investigators establish a close relationship with the individuals . This may help reduce a generally held perception by contributors in the realm that study is distinguished from practice and has modicum direct application . Furthermore , for contributors in a study , sharing their stories may make them feel that their stories are distinctive and that they are heard . When they tell a story , this will help them to understand topics that they need to manipulate and process . Telling stories is a natural part of life , and persons

entirely have stories about their experiences to tell others. From this perspective, narrative study takes the shape of an everyday, ordinary form of data that is common to individuals.

Narrative research design is a comprehensive category for an assortment of types of narrative studies . These types such as autobiographies , life histories , and personal narrative of students and educational staff . The specific type of narrative research relies on who writes or register the story , how much of a life is registered and presented , who supplies the story , and whether a theory is utilized by the researcher . Narrative researchers gather stories from contributors and retell or restory the contributors' stories into a framework such as a chronology of the characters , the setting , the issue , the events , and a resolution of those events . Additionally , the researchers may collect field texts and shape them into themes or categories and depict , in details , the setting or atmosphere in which the stories are told . During the research process , the researcher emphasizes the cooperation between the researcher and the contributor (ibid : 517) .

7. Mixed Method Design : A mixed method research design is a procedure for gathering , analyzing , and mixing both quantitative and qualitative methods in one study or groups of studies to understand a research problem . The basic assumption is that the uses of quantitative and qualitative methods together will provide a better understanding of the research problem and question than any other method by itself . If the researcher uses this design , he / she will need to understand" both" quantitative and qualitative research . This makes this form of design a superior method procedure . The procedures are time – consuming , needing an inclusive data collection and analysis , and such time matters may require the researcher him / herself contribute in a research team when conducting it . Additionally , mixed methods research is

not easily collecting tow distinguished fragments of research qualitative and quantitative . It comprises of mixing , linking , or embedding the two fragments . Briefly , the data are mixed in a mixed methods research (ibid : 535) .

The researcher conducts this type of designs when he / she has both qualitative and quantitative data and both types of data are necessary to the study so as to provide a better understanding of the research problem than other types of methods . Mixed methods research is an excellent design to utilize if the researcher seeks to build on the strengths of both quantitative and qualitative data . Quantitative data produce particular numbers that can be statistically analyzed and also yield results and conclusions to assess the frequency and magnitude of trends and can provide beneficial information if the researcher needs to describe trends about a large collection of people . On the other hand , qualitative data show many different perspectives on the study topic and supply a complex description of the situation .

The researcher also conduct a mixed methods research when one type or form of research (qualitative and quantitative) is not sufficient to address the research problem or answer the research questions . More data is required to extend , interpret , or explain the first database . For instance , the researcher may want to examine the data qualitatively to develop a means or to identify variables to test in a later quantitative research . The researcher engages in a mixed methods study when he / she wants to follow up a quantitative study with a qualitative one to catch more detailed , particular information than can be obtained from the outcomes of statistical tests . Additionally , the researcher conducts this type of designs when he / she seeks to supply an alternative perspective in a study . For instance , an experimental study in which the experiment produce valuable information about results , but the

supplemental collection of qualitative data develops a more in – depth understanding of how the experimental interference actually worked (ibid).

8. Action Research Design: Action research design is very similar to mixed methods design in that it also uses data collection depends on either qualitative or quantitative methods or both. However, the difference between these two forms of designs is that action research design addresses a particular, practical matter and wants to catch solutions to a problem. Thus, action research designs are systematic procedures done by teachers or other members of the teaching staff to collect information about the ways their specific teaching staff operates, their teaching, and their student learning. Educators desire to develop the practice of education by studying matters or problems they encounter. Teaching staff contemplates about these problems, gather and analyze data, and carry out changes relied on their results. In some cases, investigators address a local, practical problem, such as a classroom matter for a teacher. In other cases, investigators want to reinforce, transform, and release contributors from situations that chain their personal growth and independence (Creswell, ibid: 577).

Action research design is conducted when the researcher has a particular educational problem to solve . This problem may be assessing the difficulties encountered by part — time faculty , checking whether problem — based learning is advanced to the traditional lecture, or finding out how literacy in writing appears for first — stage students . Action research design supplies a chance for the teaching staff to reflect on their own pursuits (ibid) .

Action research design is divided into two main types or forms . The first type is termed **practical action research** , which is an approach that includes

educators checking a school setting or situation with a view toward reinforcing practice . Rather than an attempt to shed light on individual teachers solving direct classroom problems or schools addressing internal matters or issues . The second type is termed **participatory action research** , which has a social orientation or roots and concentrates emphasis on research that participates to liberation or changes in the society . Participatory action research seeks to reinforce the quality of organizations , society , and family daily lives . It adopts an objective of reinforcing and enabling individuals and organizations in educational situations (ibid : 592) .

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