

## Comparison of Research Designs Template

The following seven tables provide an annotated template to guide you through the comparison of research designs assignment in this course. These tables help you organize your thoughts surrounding research designs. The tables include:

- Descriptions of basic research designs.
- Types of basic research designs.
- Main characteristics.
- Followed steps.
- Appropriate usage.
- Purpose statement and sample questions.
- Associated research paradigms.

This template relies on the course text, *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research* (Creswell, 2008). Each table includes relevant Chapters and page numbers to guide your research.

### Reference

Creswell, J. W. (2008). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (3rd ed.). Upper Saddle River, NJ: Prentice Hall.

## Descriptions of Basic Research Designs

Basic Research Design	Creswell Text Reference	Description
Experimental Designs	Pages 59–62 and Chapter 11.	Experimental designs are quantitative and intervention based in nature. They fall under the pragmatist and positivism paradigms of research in its own way. The purpose of this type of study is to determine whether a specific intervention will yield a specific result with one group, while being withheld from another.
Correlational Designs	Pages 59–62 and Chapter 12.	Correlational designs are quantitative in nature. This design is rooted in intervention. This fall under the positivism paradigm of research. The purpose of this type of research is to analyze variable and the predictability under a control group.
Survey Designs	Pages 59–62 and Chapter 13.	Survey designs are quantitative in nature. They fall under the interpretivist and constructivist paradigm of research. This type of non-intervention research is designed to form a general understanding of values, opinions and beliefs gathered from a sample that is representative of the population.
Grounded Theory Designs	Pages 59–62 and Chapter 14.	Grounded theory design is a type of qualitative research. This type of systematic research is used to formulate theories to social variables like process and interaction among people. This design also employs the interpretivist and constructivist paradigm. A key factor in this design is data collection.
Ethnographic Designs	Pages 59–62 and Chapter 15.	Ethnographic designs are qualitative in nature. They are also based in the post-positivism paradigm because their purpose is to understand and describe patterns of cultural variables over a period of time. Observation is a key factor in this model.
Narrative Research Designs	Pages 59–62 and Chapter 16.	Narrative research designs are qualitative in nature. They are based in the post-positivism paradigm of research. This type of design allows the researcher to develop narratives on experiences of oneself and others within the educational community.
Mixed Methods Designs	Pages 59–62 and Chapter 17.	Mixed methods designs are hybrids between quantitative and qualitative research. Though this employs the data collection and analysis of quantitative research, the design also allows for qualitative data which better explores the nature of research. This approach is good for multiphase series of study. This is a pragmatist approach to research paradigms.
Action Research Designs	Pages 59–62 and Chapter 18.	Action research is a mixed research design with elements of quantitative and qualitative research. This systematic approach also falls under the critical and advocacy paradigm of research because its purpose is to challenge well know data while implementing new and changing ideas to an already set system.

## Types of Basic Research Design

<b>Basic Research Design</b>	<b>Creswell Text Reference</b>	<b>Types</b>
Experimental Designs	Chapter 11, beginning on page 310.	The types of experimental research design are split between two. The first is between-group designs: True experiment, quasi experiment, and factorial designs. These are controlled using pretest and blocking among other controls. The second group is within-group design: Time series, repeated measures, and single subject. The controls that are used for these types of design are varied even among each type of experiment.
Correlational Designs	Chapter 12, beginning on page 357.	Correlational designs are types of relational research. The first of two types is the explanatory design, which is the researcher explores two or more variables to associate the changes between the two given a change to one. The prediction design is based on the researcher investigating and predicting which criterion will most predictable.
Survey Designs	Chapter 13, beginning on page 389.	The types of survey design include two major types. The first being the cross-sectional design. This is inclusive of the researcher conducting the interviews or surveys, the instrument, at one point in time to study the current attitudes, beliefs or opinions. The other major type is longitudinal designs. These types of designs change either the grouping over time to determine changes in beliefs or attitudes for the purpose of the study, which can be trend, cohort or panel based.
Grounded Theory Designs	Chapter 14, beginning on page 433.	The types of grounded theory designs can be systematic, emerging or constructivist. The systematic types are based in the idea that emphasizing data analysis can yield selective coding and logical paradigm theories. The emerging types are based in the idea that theory is not based simply in describing categories; rather it is the connection between categories and emerging data that is important. The constructivist designs are based in idea that meaning derived by the study participant yield theories about beliefs and attitudes on the specific topic and go even further to assert that jargon and conceptual maps pull away from grounded theory.
Ethnographic Designs	Chapter 15, beginning on page 475.	Ethnographic designs consist of three types. The first is the realist ethnographies, which is an account of a situation, usually observed by a third party person and is unbiased. The second is case studies, which somewhat differs ideologically from ethnographies because they are centered on a specific program, event or activity. The last is critical ethnographies which the researcher focuses the study on a marginalized group.
Narrative Research Designs	Chapter 16, beginning on page 513.	Narrative research designs consist of five types and are all based in the forms of questions. Who writes the story is one type because it can be biographical or auto biographical. The second type is how much life is recorded and presented because educational narratives normally do not cover an entire life span. Who provides the story is the third, and this should address persons of relevancy to the study. The fourth type is the question of is a theoretical lens being used because this question provides structure and boundaries. The final type is can narratives forms be combined because combining forms can yield different perspectives on seemingly the same area of research and this question should be answered by the researcher for

		his/her specific use of narrative design.
Mixed Methods Designs	Chapter 17, beginning on page 556.	The mixed method design has four distinct types. The first type is the triangulation design which is the collection of both qualitative and quantitative research and merge it to lead to an a thorough understanding of the research problem. The second type is embedded design which is to collect both types of data at the same time but one being a supportive form of research to the other. The explanatory design is the process of collecting quantitative research and then collecting qualitative research to explain the results of the previous research. The final type of design is the exploratory design which is collecting qualitative research first to explore the problem then use quantitative research to explain the relationships in the first type of research.
Action Research Designs	Chapter 18, beginning on page 599.	There are two types of action research designs. The first is practical action research that is based on the idea of research having a specific school situation that needs addressing. This particular type has small scale focus and can be conducted for a specific site. The second type is participatory action research. This type of action research is based on social conditions and inquiry that occurs outside of the instructional setting which affect the condition of society.

## Key Characteristics

Basic Research Design	Creswell Text Reference	Key Characteristics
Experimental Designs	Chapter 11, beginning on page 300.	Some of the key characteristic of this type of design are random assignment; a way of forming sample groups, control over extraneous variables; a way of understanding variables that influence the outcome, manipulating treatment conditions; the way a researcher interposes to change the condition of the experiment, and outcome measures; the response criterion that can have a variable effect on the treatment variables such as group comparisons and threats to validity.
Correlational Designs	Chapter 12, beginning on page 360.	The key characteristic of this type of design are the display of scores, association between scores, and the multiple variable analysis. The display of scores is based on the researcher's ability to gather information and present it in either a scatterplot or a correlation matrix.
Survey Designs	Chapter 13, beginning on page 389.	The key characteristic of this design are sampling the population in a manner that is repetitive of what the research is trying to find within a certain population, collecting data through questionnaires or interviews geared towards that population, designing authentic instruments of data collection so that credibility would not become an issue, and obtaining a high response rate so that the study is truly representative of the population as a whole.
Grounded Theory Designs	Chapter 14, beginning on page 440.	The key characteristics of grounded theory design are process approach; the sequence of action and interactions pertaining to the topic, theoretical sampling; applying one's theory to guide research, constant comparative data analysis; generating and connecting categories based on comparison, a core category; making selections of categories based on factors such a relationship between or among different categories, theory generation; the ability to create and recreate theories based on the findings, and memos, a way a researcher can keep track of the thinking and generation of theories throughout the project.
Ethnographic Designs	Chapter 15, beginning on page 479.	The key characteristics of the ethnographic design are cultural themes which are the general position the researcher implies are and are agreed upon by society, a cultural-sharing group who are two or more people that hold the same cultural characteristics (language, beliefs, and behaviors), shared patterns of behavior/ belief/ language which is the common social interactions among the characteristics, fieldwork where the research gathers various types of data (emic, etic, and negotiation), descriptions/ themes/ interpretation which is an analysis of those factors rendering themselves to the study and how they affect the group, context or setting which are the variable that influence the attitudes and shared characteristics of the group, and researcher reflexivity which is the researcher's ability to be aware of the role s/he plays within study in respect to site and the group.
Narrative Research Designs	Chapter 16, beginning on page 515.	The key characteristic of narrative designs are individual experiences which help understand one perspective, chronology of the experiences which view the experience over a period of time, collecting individual stories with helps with the focus and relevancy of each story, restorying which aids in the narrative focusing on the desired aspects of the experience, coding for themes which help break the narrative down into focused themes, context or

		setting which is valuable to determining how and why the experience occurred, and collaborating with participants which is valuable to ensure they are represented accurately and fairly.
Mixed Methods Designs	Chapter 17, beginning on page 562.	The key characteristic of mixed design are rationale for the design which explains the need for both types of research, quantitative and qualitative forms of data which helps make sure one is using the appropriate data from each type to yield the result, priority because it determines which type of mixed design one uses, sequence which is the manner in which one explores the research to adhere to the design, data analysis matched to the design, and diagramming of the procedure to create authentic mixed methods design research.
Action Research Designs	Chapter 18, beginning on page 605.	The key characteristics of action research are a particular focus which is determined by either the educational environment or society, the educator-researcher's own practices which focuses mostly on practical action research, collaboration which can occur within the educational setting or the environment outside of the educational setting that affects the study, a dynamic process which ensure that change occurs because of the reflection process, a plan of action which is a direct response to the problem addressed in the research, and sharing research where the results yielded from the study will be readily available to those who could benefit from it.

## Steps Followed

Basic Research Design	Creswell Text Reference	Steps Followed
Experimental Designs	Chapter 11, beginning on page 325.	The step for this design include: Deciding if an experiment addresses the research problem, forming a hypothesis to test cause-effect relationships, selecting experimental unit (place) and identifying study participants (sample group), selecting a treatment (experimental) and introducing it, choosing a type of experimental design, conducting experiment, organizing and analyzing data from experiment, and developing experimental research report.
Correlational Designs	Chapter 12, beginning on page 370.	The steps for correlational designs are: Determining if a correlational study best addresses the research problem; identifying the association between two set of numbers and their relationship, identifying individual to study, a way of randomly selecting people for the sample, identifying two or more measures for each individual in the study, a way of identifying variable and instruments to study those variable, collecting data and monitoring potential threat, a way of observing the measures and their effects on participants, analyzing data and interpreting results, a manner of describing the degree to which the variables have an association, and interpreting the results, making sense and final correlations between the measure and their effects.
Survey Designs	Chapter 13, beginning on page 414.	The steps for survey designs are:: Deciding if a survey is the best design to use, identifying the research question or hypothesis, identifying the population/sample frame/sample, determining the survey design and data collection procedures, locating or developing an instrument,(survey or interview), administering the instrument, analyzing the data to ensures it addresses the question or hypothesis, and writing the report on the findings.
Grounded Theory Designs	Chapter 14, beginning on page 448.	The steps for grounded theory designs are: Determining if a grounded theory design best addresses the research problem, identifying a process of study to have a tentative idea of the process which guides the grounded theory, seeking approval and access from the institution for which your theory will be effecting or based upon, conducting a theoretical sample ensure the theory and data are completely observed/studied, coding data to determine which data is most relevant for next collection, using selective coding and developing the theory, validating the theory that accurate accounts for the events conducted during the research process, and write a grounded theory report to demonstrate the manner in which the theory was created and why.
Ethnographic Designs	Chapter 15, beginning on page 486.	The steps for ethnographic designs are: identifying intent and the type of research design, relating intent to the research problem, discussing approval and access considerations, using appropriate data-collection procedures, analyzing and interpreting data within the design, and writing a report consistent wit the design. Though each of these steps is key, it is important to understand why one is taking on this study (step one), respect the site in which one is conducting the study (step two), use multiple types of data collection to make sure the study is not biased (step three), make sure interpretations are balanced (step four), and make sure finding shed light on knowledge of shared patterns (step five).
Narrative	Chapter 16,	The steps for narrative research designs are: identifying the phenomenon to

Research Designs	beginning on page 523.	explore that addresses an educational problem so that one has an authentic study, purposefully selecting an individual from whom the researcher can learn about the phenomenon due to the narrator's experience, collecting the story from the individual so that it can be shared and studies, restorying the individual's story to focus it and narrow it to address the phenomenon, collaborating with the storyteller to ensure that all aspect are correctly depicted, writing a story about the participant experience, and validating the accuracy of the report.
Mixed Methods Designs	Chapter 17, beginning on page 567.	The steps for mixed method designs are: determining if mixed methods studies are feasible to lend the result for which one seeks, identifying the rationale for mixing methods so that one chooses the correct design type, identifying a data collection strategy which gives priority to the type of research required to implement the design type, developing quantitative/ qualitative/ mixed methods questions, collecting the data in respective order for which the design type requires, analyzing the data as determined by design type, and writing the report as a one or two phased study, which too is determined by the type of mixed method design,
Action Research Designs	Chapter 18, beginning on page 609.	The steps for action research designs are: determining if action research is the best way to approach the problem, identifying the specific problem that the research would study, locating the proper resources to help address the problem and find a viable solution, identifying the information that is needed to attack the problem specifically and accurately, implementing data collection that is specific to the research problem, analyzing the data, developing a plan of action that is realistic, and implementing the plan of action and reflecting on the outcomes the plan provided.

## Appropriate Usage in a Real-Life Setting

Basic Research Design	Creswell Text Reference	Appropriate Usage In a Real-Life Setting
Experimental Designs	Chapter 11, page 299.	An experimental research design would be best if a researcher wanted to explore whether students who use Accelerator Reader programs could increase reading scores on a state accountability test.
Correlational Designs	Chapter 12, page 356.	A correlation design would be best if a researcher wanted to explore the whether AR program worked as a supplement to instructional reading classes or whether it should be the sole curriculum for students who read below grade level.
Survey Designs	Chapter 13, page 388.	A survey design would be best if a research wanted to evaluate the parental opinion of the rigor and relevance of the AR program for the students who perform below grade level.
Grounded Theory Designs	Chapter 14, page 432.	A grounded theory design would be good to use if a researcher wanted to formulate a theory about the appropriate uses for the AR program to raise below grade level readers' scores.
Ethnographic Designs	Chapter 15, page 473.	An ethnographic design would be best if a researcher wanted to know why reading levels of Native American students living on a reservation are so low.
Narrative Research Designs	Chapter 16, page 512.	A narrative research design would be best if a researcher wanted to evaluate the success of a previous lower performing student who used the AR program to achieve reading at grade level.
Mixed Methods Designs	Chapter 17, page 552.	A mixed method design would be best used if a research would like to build on the research of AR program success in high performing schools and how it transfers success to a lower performing school in the area of reading.
Action Research Designs	Chapter 18, page 597.	An action research design would be most appropriate if a researcher wanted to explore how community involvement with the AR program could enhance lower achieving students through a designated reader of the week from the community.

## Purpose Statement and Sample Questions

Basic Research Design	Creswell Text Reference	Purpose Statement and Sample Research Questions
Experimental Designs	Chapter 11, page 316.	<p>The purpose of this study is to explore what percentage of below grade level readers could increase their AYP in reading through the use of the Accelerated Reading program as a supplement to regular reading classroom instruction. The questions this research project would address would be:</p> <ul style="list-style-type: none"> <li>-the success of the AR program for readers who perform below grade level</li> <li>-the success of supplemental help for students who struggle in reading</li> </ul>
Correlational Designs	Chapter 12, page 345.	<p>The purpose of this study is to determine whether AR could be used as a supplement to reading programs or a curriculum in itself for student performing below grade level. The question this research project would as would be:</p> <ul style="list-style-type: none"> <li>-how well students perform in reading wit the AR program by itself</li> <li>-how well students perform in reading with the AR program in conjunction with the regular classroom reading instruction</li> </ul>
Survey Designs	Chapter 13, page 385.	<p>The purpose of this study is to evaluate the opinions and an attitude towards the AR program of parent's whose children are performing below grade level. The questions that this study would assess would be:</p> <ul style="list-style-type: none"> <li>-whether or not the parent believe the this program has the appropriate level of rigor for their students (not too high or not too low)</li> <li>-whether or not parent believe this program has beneficial outcomes to bridge the reading gap that their children are experiencing.</li> </ul>
Grounded Theory Designs	Chapter 14, page 419.	<p>The purpose of this study is to formulate a theory as to the best way to utilize the AR program for struggling readers. The questions that this study would assess are:</p> <ul style="list-style-type: none"> <li>-do the current theories about supplemental reading programs sufficiently address the problems students are facing when they read below grade level</li> <li>-are the theories about supplemental reading programs and reading curriculum accurately depict what is happening now in the current realm of deficit readers.</li> </ul>
Ethnographic Designs	Chapter 15, page 459.	<p>The purpose of this study is to explore the cultural effects of living on a Native American reservation have on reading level of students who attend reservation schools. The questions this study will assess are:</p> <ul style="list-style-type: none"> <li>- what factors of Native American cultural affect the reading</li> <li>- how does culture and marginalization of that cultural affect a student's desire to learn from the group who is responsible for their marginalization</li> </ul>
Narrative Research Designs	Chapter 16, page 492.	<p>The purpose of this study is to explore how previous students who used the AR program to achieve their goals of reading at grade level. The questions this study would assess are:</p> <ul style="list-style-type: none"> <li>-what type of commitment it takes to be successful at AR</li> </ul>

		-What type of goals are attainable through the AR program to raise a student's reading level.
Mixed Methods Designs	Chapter 17, page 530.	<p>The purpose of this study is to determine whether the success of AR programs can be transferred to lower performing schools using the same resources. The questions this study would assess are:</p> <ul style="list-style-type: none"> <li>- would schools of lower performs be able to duplicate the success of schools that are higher performing using the same reading program.</li> <li>- how does a high performing school differ originally in the success of students using the AR program than that of lower performing schools.</li> </ul>
Action Research Designs	Chapter 18, page 571.	<p>The purpose of this study is to determine if community member who volunteer to read to lower achieving students and discuss the reading to them, using AR program approaches, would positively affect the score of lower achieving readers. The questions this study would assess are:</p> <ul style="list-style-type: none"> <li>-how does having member of the community help student buy in to the AR program</li> <li>-what effect does having successful community members participate in local poor perform reading schools give students a sense of reading as a tool employed by successful people.</li> </ul>

## Associated Research Paradigms

Basic Research Design	Creswell Text Reference	Associated Research Paradigms
Experimental Designs	Chapter 11.	I believe this design to be positivism and pragmatist. I say this because the nature of experimental designs is to thoroughly assess what factors have the biggest influences on a study and determine how those factors can be manipulated to predict and yield the result that one wishes.
Correlational Designs	Chapter 12.	I believe the positivism paradigm is the best paradigm to describe this process. This is because of its focus on discovery, predictability, and control.
Survey Designs	Chapter 13.	This type of design I believe to be interpretivist and constructivist paradigm of research because of its basis of understand social actions. This type of design is especially geared towards knowledge and description rather than intervention.
Grounded Theory Designs	Chapter 14.	Because this design is an example of the interpretivist and constructivist paradigm, it is easy to see that grounded theory designs are based in the understanding and formulation of descriptive theory that help drive change.
Ethnographic Designs	Chapter 15.	Though this design is post-positivism paradigm for the majority because its purpose is to understand and describe patterns of cultural variables over a period of time, I believe that this paradigm for this design could also fall under critical and advocacy because its ability to challenge the preconceived notions about some cultural groups.
Narrative Research Designs	Chapter 16.	I believe this design to be rooted in the post-positivism paradigm of research. I say this because accurately portraying the experiences of others lends itself to creating an understanding of reality through vivid description.
Mixed Methods Designs	Chapter 17.	This is pragmatist approach to research paradigms due to the fact that it based in both experimental results and can have practical outcomes of research that can be derived from both types of research.
Action Research Designs	Chapter 18.	This is critical and advocacy paradigm of research because its purpose is to challenge specific problem in the educational system while implementing new and changing ideas to an already set system.