

Introduction to Educational Research

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Abstract:

A great deal of social research is conducted to explore a topic or familiarize oneself with a topic. This typically occurs when a researcher becomes interested in a new topic or when the subject of study itself is relatively new. Often times, exploratory research is done through the use of focus groups or small group discussions, which are frequently used in market research. Another major purpose of social research is to describe situations and events. The researcher observes and then describes what he or she observed. One great example of descriptive social research is the U.S. Census. The goal of the census is to describe accurately and precisely several characteristics of the U.S. population, including race/ethnicity, age, sex, household size, income, etc. The author conveys the introduction of Educational Research via this article.

Keywords: Educational research, Research problem, Social research, Sociology

1. Introduction

As a student, teacher, or administrator, consider how many times you have heard, "evidence-based practice" or "According to the research." It seems that every new idea in education is research-based, but what does that really mean? This overview is a summary of important concepts and considerations related to research in education.

2. What is Educational Research?

Educational research refers to a variety of methods, in which individuals evaluate different aspects of education including but not limited to: "student learning, teaching methods, teacher training, and classroom dynamics". Educational researchers have come to the consensus that, educational research must be conducted in a rigorous and systematic way, although what this implies is often debated. There are a variety of disciplines which are each present to some degree in educational research. These include psychology, sociology, anthropology, and philosophy. The overlap in disciplines creates a broad range from which methodology can be drawn. The findings of educational research also need to be interpreted within the context in which they were discovered as they may not be applicable in every time or place.

3. Characteristics

In his book entitled Fundamentals of Educational Research, Gary Anderson has outlined ten characteristics that can be used to further understand what the field of educational research entails:

- Educational research attempts to solve a problem.
- Research involves gathering new data from primary or first-hand sources or using existing data for a new purpose.
- Research is based upon observable experience or empirical evidence.
- Research demands accurate observation and description.
- Research generally employs carefully designed procedures and rigorous analysis.

- Research emphasizes the development of generalizations, principles or theories that will help in understanding, prediction and/or control.
- Research requires expertise-familiarity with the field; competence in methodology; technical skill in collecting and analyzing the data.
- Research attempts to find an objective, unbiased solution to the problem and takes great pains to validate the procedures employed.
- Research is a deliberate and unhurried activity which is directional but often refines the problem or questions as the research progresses.
- Research is carefully recorded and reported to other persons interested in the problem.

4. Why Educational Research?

Educators need to be consumers (and producers) of research. Creswell (2002) notes the following reasons, describing the various purposes of educational research:

4.1 Improve Practice

Research can suggest ways of improving practice that have been verified with many applications and by many different types of people, which is difficult for practitioners.

4.2 Add to Knowledge

Research can add to what we know about how people learn and what we can do help facilitate the learning process.

4.3 Address Gaps in Knowledge

Research can address areas in which little is known, like perhaps the effects of online versus traditional classroom learning.

4.4 Expand Knowledge

Research can allow us to extend what we know in ways we never conceived.

4.5 Replicate Knowledge

Research can act as a test to verify previous findings.

4.6 Add Voices of Individuals to Knowledge

Research can add an important perspective for different learning types. Much of the educational research prior to the Eighties is based on able, white, middle-to-upper class males. This is certainly not reflective of our increasingly heterogeneous students, and research helps revise theory and practice to reflect different student needs. These are only a few of the many reasons research is important, particularly to educators. In an increasingly data-driven society, it is vital that educators know how to locate, find, and interpret research on their own. Further, educators need to be able to conduct quality research to examine issues within their own contexts.

5. How is Research Distinguished?

The final emphasis point in this brief introduction is fundamental your understanding as a soon-to-be consumer/producer of research. Where most introductory students struggle is in distinguishing primary and secondary sources. We'll return to this later, but to be sure we are clear from the beginning. Empirical research implies that the study is original and stresses systematic observation. Journal articles and other types of peer-reviewed sources (such as academic conference papers) are the main venue for empirical research. These first publications of empirical research are also referred to as primary sources. In academic settings, you are generally only to use primary sources. Your best source for journal articles is a research database. If nothing else, you can visually tell that periodicals, such as newspapers, magazines,

online weekly reports (such as Education Week), or even text books, dictionaries, and encyclopaedias (like Wikipedia) are much different. The usual tip is that these types of publications have advertisements, where journal articles generally do not. These are all secondary sources. You might see references to research, but the actual report is in a journal article, as above. You are generally not to use secondary sources.

6. Purpose of Research

Exploratory

This type of research investigates an area or issue on which little previous work has been carried out. In an organisational setting it may be used to discover whether or not a problem exists.

• Speculative

Sometimes research is implemented strategically, where researchers take account of current situations and speculate as to their future implications. For example, the introduction of a specific government policy might raise implications for practitioners involved in its implementation. Research of this nature might speculate as to what these implications might be and develop a programme of inquiry that can inform future responses to these issues.

• Descriptive

Descriptive work aims to gather information that illuminates relationships, patterns and links between variables. An example would be an investigation of the link between students' study skills and course drop-out rates.

Explanatory

Explanatory research aims to show why relationships, patterns and links occur. Using the example from 3, how could study skills support improve student retention? And does this depend on other factors such as different types of support available?

Predictive

The purpose of this type of research is to develop a model that predicts the likely course of events given particular intervening variables or circumstances.

• Evaluative

To evaluate the impact of something, for example a new policy, event, law, treatment regime or the introduction of a new system.

7. Conclusion

While there are three distinct purposes of social science research, most studies will have elements of all three. For example, suppose a researcher sets out to evaluate the effectiveness of a new form of psychotherapy. The study will have exploratory aspects as he or she explores possible relevant variables and their effects on the therapy. The researcher will also likely want to describe things such as recovery rate. In addition, he or she will likely want to explain why the new form of therapy works better for some types of people or problems than others.

References

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