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*Article history:*

Received: 28<sup>th</sup> January., 2022

Accepted: 29<sup>th</sup> January., 2022

Published: 31<sup>th</sup> January., 2022

*Abstract. An evaluation of research in education, with the general aim of systematically, improving an academic body of knowledge may deficits in systems be highlighted by well designed research. The results of research can lead (ideally) to changes in methods or practices (in the case of education it might be a teaching methods, say online Vs in class on campus). This would ideally appropriate education is provided to the students resulting in a more effective/efficient population. This paper explores different senses of the concept of meaning in educational research, presenting ‘meaning’ as personal (the researcher’s quest for meaning through research), contextual (meaning in relation to linguistics and culture) and shared (through communication), offering the various types, challenges, benefits and forms of research in practice-based research in educational technology.*

*Key words: Education, research, technology, teacher and knowledge.*

## INTRODUCTION

Technology is dramatically changing educational research processes, at a time of high demand for ‘evidence-based’ policy and practice. It will interpret and evaluate research in technology- rich environments. Everybody is engaged in the critical study of original empirical research to learn about cutting edge methods of data collection and analysis. Philosophical assumptions underlying educational enquiry are to be examined [2].

The Importance of research in higher education say that knowledge is enough to make productive career but nowadays competition is so tough that higher education is must to make a mark at higher level. It doesn’t really matter that whether we are interested in history or science, computer or management, higher education will provide you that extra bit of ease to pick up much required speed at corporate level in beginning. But main question is how to make your higher education more productive [3]. It does not depend on university or college to be selected or it’s a course selection that makes all the difference.

The fact is all of those students who are cautious about their study are well enough to make good

selection over course and college. Actually that makes difference is research in technical and higher education which holds the level holds its own importance [4]. To conduct research, one

need to study and look for references, sources and market research and carefully analyze the topic you are researching, including evidence and theories.

The need of performing educational Research will start from effective programs and teaching methods which will help students to learn what they really want to discover relationships between variables in educational settings to plan interventions. It will help them to understand cultural contexts of schools to create schools that embody justice and reduce prejudice and inequality.

From the individual researcher’s perspective we investigate topics about which we are curious or passionate; as well, we do research because it is an integral part of the academic role and a central factor in academic promotion. Individually and collectively, educational research is a part of a quest for meaning. Conceptions of knowledge, like linguistic and conceptual meaning, are both personal and contextually based. In recent years some educational researchers have focused on epistemological meaning [5].

### TYPES OF EDUCATIONAL RESEARCH

Historical research generates descriptions, and sometimes attempted explanations, of conditions, situations, and events that have occurred in the past. For example, a study that documents the evolution of teacher training programs since the turn of the century, with the aim of explaining the historical origins of the content and processes of current programs.

Descriptive research provides information about conditions, situations, and events that occur in the present. For example, a survey of the physical condition of school buildings in order to establish a descriptive profile of the facilities that exist in a typical school.

Co relational research involves the search for relationships between variables through the use of various measures of statistical association. For example, an investigation of the relationship between teachers’ satisfaction with their job and various factors describing the provision and quality of teacher housing, salaries, leave entitlements, and the availability of classroom supplies.

Causal research aims to suggest causal linkages between variables by observing existing phenomena and then searching back through available data in order to try to identify plausible causal relationships. For example, a study of factors related to student ‘drop out’ from secondary school using data obtained from school records over the past decade.

Experimental research is used in settings where variables defining one or more ‘causes’ can be manipulated in a systematic fashion in order to discern ‘effects’ on other variables. For example, an investigation of the effectiveness of two new textbooks using random assignment of teachers and students to three groups – two groups for each of the new textbooks, and one group as a ‘control’ group to use the existing textbook.

Case study research generally refers to two distinct research approaches. The first consists of an in-depth study of a particular student, classroom, or school with the aim of producing a nuanced description of the pervading cultural setting that affects education, and an account of the interactions

### BENEFITS OF RESEARCH IN EDUCATION

<b>256</b>	<b>ISSN 2277-3630 (online), Published by International journal of Social Sciences &amp; Interdisciplinary Research., under Volume: 11 Issue: 01 in January-2022</b> <a href="https://www.gejournal.net/index.php/IJSSIR">https://www.gejournal.net/index.php/IJSSIR</a>
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Research will help to understand any subject and its principals in much better and easier way which will encounter new questions and search for answers of those questions will lead you to learn new theories of any subject.

Research means trying something out of the box. When it is done such things it will separate one from other students which will surely attract attention of your tutors as well which in turn benefit extreme need of help from someone who is more knowledgeable than the other.

Research is not always a concept that practitioners, managers and policy makers respect. Too often it is seen as an academic activity conducted by others – to the profession, not with the profession.

Research education professionals are always learning, finding out things, analyzing information, adapting their behavior according to information received, looking to improve and adapting to modern demands.

Practitioners have to comply with policy. Teachers can adapt it to fit the individual needs of their own pupils.

As teachers are accountable, the public must have faith in the profession – and attitudes to education vary across many social groups – so the performance of teachers can be demonstrated through the publication of research findings.

Teachers project their own personality upon learning experiences. Sometimes this is intuitive and these decisions can either be successful or fail. Research methodologies give teachers the tools to analyze and make informed decisions about their practice.

Research helps teachers to share with colleagues. Too often research looks backwards and there are lessons to learn.

However, it would be better to prefer a research in education as invention and innovation so that it should be future oriented and designed to benefit learners rather than the researchers themselves.

#### CHALLENGES IN RESEARCH EDUCATION

The learning and teaching experience be based upon research and evidence, but it runs the risk of being any one of theory, ideology, convenience and prejudice.

Education should serve to liberate, and promote democracy and equality of opportunity.

Ideology can be dangerous. Teachers have a social responsibility – to develop active citizens. Following an ideological route restricts choice, which is the opposite to the real purpose of education.

What is been taught in an age gone by – new theories and technological advances have taken, and are taking, place. Basing our practice solely on our own learning experiences, without reflection, mean education runs the risk of being outdated and not being forward- looking.

Any single theory cannot operate in isolation. Learners and learning are complex and success is influenced by a multitude of factors, social backgrounds, family background, personality, age, gender, location etc. Theories needs to be combined, tested and challenged in order to allow us to adapt to suit local and personal environments.

Convenience and manageability are important. Teachers can occupy and even control pupils, as well as entertain them. Learning new things and new ways of behaving can be uncomfortable. It is not enough to base teaching and learning around convenience.

Research can help teachers to understand what works and why, what the short and long- term implications are, provide a justification and rationale for decisions and actions, help to build a repertoire to help deal with the unexpected, identify problems, inform improvement and so forth

Based on above challenges only one cannot adhered to the research, but the decisions upon evidence is morally sound [1].

### IMPLEMENTATION

The research awareness in educational field can be implemented in the following forms which can lead into the improvement of in terms of progress can be observed.

The various forms of research should suit policy makers, planners and implementers of policy.

Large scale studies into pupil performance can help to identify trends and enable educational outcomes to be related to social and economic needs.

Policy makers want to see the big picture. On the other hand, practitioners want to know why some techniques work and others don't.

All professionals need to be able to trust the source of information – and strict research ethics provide that assurance.

The profession as a whole needs access to a range of data/evidence types.

Teaching does involve creative thinking and experimentation.  
Individuals and professional groups need to know what works and why.

Whether a teacher's action lead to improved pupil performance, increased motivation, commitment, better behavior or not, but it will surely reflect that research is more formal.

However, these all need to be connected, and too often research is conducted in isolation of others.

### CONTEXT IN QUALITATIVE AND QUANTITATIVE RESEARCH

258	ISSN 2277-3630 (online), Published by International journal of Social Sciences & Interdisciplinary Research., under Volume: 11 Issue: 01 in January-2022 <a href="https://www.gejournal.net/index.php/IJSSIR">https://www.gejournal.net/index.php/IJSSIR</a>
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The notion of context is extremely important for educational researchers, who must pay attention both to contextual factors and to supra-contextual theoretical concepts and standardized variables. Quantitative and qualitative researchers face somewhat different challenges in this regard.

Quantitative researchers need to design measures of constructs like anxiety, intelligence or satisfaction in order to provide accurate and relevant statistical results. This could mean designing context-sensitive instruments for research in a particular setting, or it could mean designing instruments that can produce meaningful and comparable results over many different contexts. The meaning of these results and the comparisons between them stand on the quality of the measures used and the extent to which the test designers succeeded in creating questions which were relevant to students in different cultural contexts. This results in education system in order to interpret the statistical results and plan programs for improvement.

The verification of truth claims involves logic and methods which may not be strongly contextual, but the values underlying such claims, and the motivation for researching certain questions, do spring from context.

In terms of the conducting research, one in the field needs care, honesty, rigor, time and patience, with our methods of data collection and analysis, our interpretations and our language. These things apply equally, though with differing details, to radical post-modernist feminist researchers and to positivist statisticians. These are needed to fulfill our individual strivings for meaning through contributing to and connecting with diverse communities of researchers, teachers and learners, and with the disenfranchised. The quest for meaning is like a lamp, illuminating the passages and turning points as we make our way through complex and diverse settings, questions, methods and bodies of knowledge.

#### DISCUSSIONS AND CONCLUSION

It can be concluded that conducting the research beyond a senior design project allows students to really begin to think and put all the parts of their education together and the purpose of research in education is to reflect critically on the effectiveness of personal and professional practice. It is to contribute to the development of ‘good’ rather than ‘correct’ practice.

Missing from the instrumental and technical ways of evaluating teaching and researching are the kinds of educative relationships that permit the asking of moral and ethical questions about the ‘rightness’ of actions. When based upon educative (as distinct from managerial) relations, evaluative practices become concerned with breaking down structured silences and narrow prejudices.

Evaluation of research in technical education is not primarily about the counting and measuring of things. It entails valuing – and to do this we have to develop as connoisseurs and critics. We have also to ensure that this process of ‘looking, thinking and acting’ is participative.

#### REFERENCES

<b>259</b>	<b>ISSN 2277-3630 (online), Published by International journal of Social Sciences &amp; Interdisciplinary Research., under Volume: 11 Issue: 01 in January-2022</b> <b><a href="https://www.gejournal.net/index.php/IJSSIR">https://www.gejournal.net/index.php/IJSSIR</a></b>
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1. <http://www.expressandstar.com/education/2011/06/14/the-importance-of-research-for-educations-future/#ixzz1cheoYnSP>
2. Alexander, P.A. & Dochy, F.J.R.C. (1995). Conceptions of knowledge and beliefs: A comparison across various cultural and educational communities. *American Educational Research Journal*, 32, 413-442.
3. Brownlee, J. (2001). Knowing and learning in teacher education: A theoretical framework of core and peripheral epistemological beliefs. *Asia-Pacific Journal of Teacher Education and Development* 4(1), 131-155.
4. Hiebert, J., Gallimore, R. & Stigler, J. (1992). A knowledge base for the teaching profession: What would it look like and how can we get one? *Educational Researcher*, 31(5), 3 – 15.
5. Kliebard, H. (1993). What is a knowledge base, and who would use it if we had one? *Review of Educational Research* 63, 295 – 303.
6. Tsai, C. (2002). Nested epistemologies: Science teachers' beliefs of teaching, learning and science. *International Journal of Science Education* 24(8), 771-783.