Enhancing Research Impact: Rethinking Research Approach

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Abstract- *Educational Research is being criticised for a decline in its impact specifically in terms of use of the knowledge created by practitioners and in bringing about change at the ground level reality. The contemporary research culture promotes theoretical oriented research projects yielding knowledge that has a potential use in some future time. To overcome the problem a complimentary research approach is proposed that is embedded, engaged and emergent in nature involving collaboration and co-development of the researcher as well as the practitioner located in the Jeffersonian framework of research. The three significant perspectives underpinning the Three-E approach are elaborated and explained to provide the rationality of the approach proposed. The article is suggestive in nature rather than directive as the nascent stage of the ideas proposed and the research approach floated is fully acknowledged. Nevertheless, this article expects further deliberations on the issues raised and the ideas used to generate the complimentary research approach.*

Keyword- Educational Research, Research Impact, Complimentary Approach to Research.

Introduction

Educational research is an inquiry into some phenomenon that is characterised by organization, logic, validation and relevance in taking informed educational decisions. These decisions form the cornerstones for future educational changes. Such time-tested conceptualization of educational research has inevitably been challenged and deliberations over reconfiguring of educational research are now usual features in academic parlance. There is a growing realization of the need to rethink, reconfigure and revisit educational research with a particular focus on the impact of research in terms of the use of research findings.

The contemporary emphasis on quality in higher education provides a new impetus for the academics to think over the relevance of the educational research in the contemporary scenario, particularly in the light of the plethora of thesis being submitted by educational researchers in universities across the country. The concern over the quality of educational research becomes even more significant when the research activity is being extended even to the college level as well. One can easily imagine the number of research thesis that will be submitted per year all over the country. At the same time, however, one also critically examines the relevance and practical utility of all such thesis, involving immense manpower, economic

resource and valuable time, in the field of education in particular and for the betterment of the whole society in general. The field of education is currently undergoing a state of turmoil in which even the researchers are not satisfied with the quality of their own work and they are increasingly falling prey to the emerging culture of creating half-baked research problems, developing naïve methodologies and presenting conclusions without proper theoretical base or practically feasible implications. The concerns being raised over here might not be well documented or might lack proper empirical base. Nevertheless, the concerns raised are from being pessimistic speculations. The concerns, it is being claimed with conviction, do find echoes in several minds in all the corners of the country. To a large extent those involved in the research process are responsible for the current scenario that we ourselves hesitate to argue or think aloud. However, the doctrine of "research for creation of new knowledge" that has overshadowed the researcher's academic thinking is equally significant source for the growing irrelevancy in educational research. The overemphasis on theoretical concerns and compliance with the doctrine being mentioned has made the outcomes of educational research as an intelligible jargon of conclusions which are of any particular significance for the grass-root level educators/teachers.

The time is quite appropriate for all to rethink over nature of educational research and to give way for some practice oriented, change oriented and field embedded research work along with the theoretically oriented research activities yielding propositional knowledge. The idea being placed over here is not a negation of the purpose of research to yield propositional knowledge. Rather the focus is on highlighting the need to make practice oriented research work, that goes on in a more collaborative way and that has immediate impact with respect to change in any educational context, to find a parallel status and significance and to make it a part of the very research culture.

Research Impact: A Re-Emergent Concern

The story being narrated in this article is weaved around the cardinal concept of research impact where research impact in the present context refers to the degree to which the research outcomes are used and translated into practice in the context in which research is carried out as well as other contexts. A high degree of research impact implies a greater degree of use of the research outcomes in the educational context. Potentially, there are two distinct levels of users or translators of the research outcomes. At the first level there are the policy framers and curriculum framework developers that rely on the rich research-based data for taking informed decisions while framing their policies or recommending about curriculum. At the second level are the educational practitioners that constitute the core group of educational practitioners responsible for implementation of the research-based principles and artifacts either directly or through mediation of policy or curricular recommendations.

Research Impact signifies the extent to which the research outcomes are used and translated into operational terms by the two different levels of its potential users viz. the policy framers and the practitioners. The basic researches, that are usually carried out in the field of education, generally present generalized knowledge and principles the implications of which are assumed in a future tense. Researchers generally mention these under the heading of implications while presenting their research work. They also mention suggestive actions for the practitioners depending upon the nature of their research under the heading of implications. Written in a future tense the researchers most often themselves are not sure about the translation of their research outcomes in the educational context. Consequently, the impact of the research findings is often blurred and dubious for the researcher themselves.

Further, the researches that directly involve the practitioners such as Collaborative Action Research (Rai, 2010) do not constitute a significant component of the research culture in vogue in the field of education. As such the question of direct use of research outcome by the practioners do not arise owing to the negligible number of such researches that involve the practitioners and aim to directly bring about change in an educational situation before formulating principles for change.

Thus, at both the levels the impact of research findings is in a miserarble state and that represents a growing concern among the academia even though the idea of utility of research output is inbuilt in the very fundamental conceptualization of research. Bassey clearly states that research findings help in taking informed decisions by the potential users of the research outcomes. However, the growing ritualistic nature of the research findings on the one hand and the issue of quality concern on the other hand have led to renewed interest in the problem of relevance of research findings in terms of the use of its outcomes. The academia is revisiting the issue of relevance and use with new perspectives that will be spelled out in sections which follow.

At the core of the concern with impact of research is the use of the research findings by the educational practitioners, remarkably having no say or no role in the overall research process, that most often find it hard to ingest the research based decisions taken at a very general level and that weigh too less with respect to the ground level problems and realities that the practitioners feel and encounter in their day to day life. The emergent concern with the impact of the research in form of distance between the time of production of knowledge and the use of the same explains the need to think of complimentary research model and clarifying the bases of such a model. The following sections provide a sketch of such a model and the bases supporting the model.

Embedded, Engaged and Emergent (E3) Model: Complimentary Model for Research

Before the complimentary model is sketched out a brief description of popular model in vogue is presented. For, purpose of clarity Bambaras continuum is invoked once again. In this continuum

the relatively low end of the continuum is one where the research problem is conceptualized by the researcher following the ideal research procedure and in collaboration with the academic body of the host institution. The researcher frames questions and goes about finding answers to these questions that are then integrated and presented in form of a thesis a new knowledge created by the researcher. The picture presented is an oversimplified picture of the actual research process, nevertheless it does capture the whole scenario in the most precise form. The details are deliberately not included because the readers are well aware with this model. The model has been termed linear as the entire process of research moves in a linear way from research problems to data collection to analysis and findings and finally to conclusions that mark the primary outcome of the research work. There is no reverting back and forth between the action part of the knowledge and the theoretical form of knowledge. They emerge as statements as propositions that are to be taken into account while framing recommendations and making policies. They may often be also suggestive of actions derived from the knowledge created. However, the suggestions for actions are not derived from an embedded and engaged process, with the meaning of the two terms as presented in the following paragraph.

The complimentary approach proposed is termed as Embedded, Engaged and Emergent (E3) Approach for research. The name of the approach as E3 in this article is not a contentious issue. Readers are invited to think out alternative names for the approach once they go through the ideas that lay behind them that are the actual concern of the author. The readers are therefore, suggested to keep themselves free of the boundaries imposed by the meaning of the words used in the phrase E3 while deciphering the ideas being explained in the following section.

Embedded Research

Research begins with a research problem. There are several sources for identification of research problems and any authentic book on research methodology can enumerate these different sources for identification of a research problem. Most often the research scholars identify research problems that are basic problems- theoretical in nature and hence the research outcomes are generally sort of refinement or enrichment of the theoretical premises and assumptions. The knowledge or knowledge artifacts thus created has implied impact for practice or professional context and it is assumed that the same will be used at some point in future, more often through mediation of policy framers and curriculum recommendations. The overall model of research is one in which the knowledge flows from without into the educational system in a delayed manner. Further, the model presents a flow of knowledge from theory towards practice in form of certain well tested rules. The interaction between theory and practice that defines the actual educational situation and instructional practices are somewhat overlooked or underrepresented. It is this loophole in the existing model that prepares the ground for the germination of complimentary models of research.

The complimentary model proposed is considered to be one where the research problem originates and the research processes ensue in the professional or educational context with the

educational practitioners playing a key role in the demarcation of the problem. The research problem devised by the researcher involves largely theoretical considerations. The idea proposed is that the researcher ought to involve the practice related and practical considerations of the educational situation. The complimentary model advocates for the enrichment and refinement of the theoretically based research problem through taking due cognizance of the considerations arising from the educational situation that is the assumed beneficiary of the research outcome. Thus, the complimentary model that is being sketched out is considered to be embedded in nature-embedded in the educational situation and practices that is expected to be influenced by the research outcomes.

Engaged Research

Educational research can be located on an imagined continnum where one extreme end of the continuum represents the research with no engagement of the researcher and the practitioner at any level whereas at the other extreme end one can locate research where the researcher and the practitioner represent the one and same person. Thus, the former represents the basic educational research that are generally approved by the academic body and are commonly funded. The latter represents the simple case of action research being carried out by the practitioner in their own professional context.

One can also think of a space located on this continuum that is co-created by the professional space of the researcher and the practitioner. The shared space, thus created involves an interaction between the researcher and the practitioner and presents the case of engaged research wherein the two partners interchange their orientations to solve complex educational problems. The researcher exhibits an orientation similar to that of the practitioner whereas the practitioner exhibits that of the researcher. It is this co-created space that has largely remained unexplored. This space represents the "Jeffersonian Framework" of research. Jeffersonian framework (named after the philosopher Thomas Jefferson) is remarkably distinct in that the research is driven by a quest for the use of the research outcome as a solution for the complex problem followed by the fundamental understanding of the phenomenon. Thomas Jefferson was of the view that research should necessarily lead to a comprehensive understanding of nature nevertheless it should also address some significantly crucial social or national problem (Koch and Peden, 1993).

This approach is reverse of the general research approach in which the quest for fundamental understanding drives the research followed by its use in solving practical problems. Engagement is then the persistent interaction between the researcher and the practitioner in the co-created space in their collaborative effort to solve the educational problem of concern. Engagement involves entering the world of practice and attempting to solve the problems in a mood of mutuality and moving towards the theoretical understanding through the process of solving the practical problems. Thus, a close interaction between the practice oriented researcher and research oriented practitioner tied together with the common concern for solving the

educational problem is what makes E3 approach an engaged approach to research. Although the degree of collaboration and power sharing between the partners may vary (Rai, 2010) nevertheless the research venture is an engaged venture since the researcher is engaged not only with the actual situation in which the research outcomes are to be used, it also involves engagement of the researcher with the practitioner at different levels such as defining the problem, designing the interventions and accepting the change in daily practice.

Emergent

The knowledge that is relevant for the practitioners and that motivates them for change and adaptation are not the ones that are given as some final rule or principle from those above in the hierarchy. Rather change is a gradual process. Complex educational problems demand change and change involves intervention. Intervention needs to be designed in the co-created space through a continuous interaction between the two partners. In designing, testing and validating intervention guided by purely theoretical considerations, there is a need to draw out the elements of the intervention from the ground realities and guided by the use of the intervention. The theoretical understanding ensues from the designing and implementation of the intervention in conformity with the Jeffersonian Approach.

Further, the design of the intervention emerges gradually through revisions in light of the inputs obtained from the practical considerations. Intervention is not a one shot design, rather it is emergent in nature involving both the partners than some dogmatic design presenting merely the theoretical perspective imposed by the researcher.

The E3 approach to research proposed is one that has its roots embedded in the educational situation and the professional practices rather than emanating from purely theoretical considerations. It involves a sort of collaboration between the researcher and the practitioner while carrying out the research process indicating a high level of engagement of the researcher with the educational situation and of the practitioner with the intervention being designed, tested and validated. Finally, the research model includes sharing of the research outcomes on a format that is more conducive for the practitioners rather than merely satisfying the standards of the research community.

E3 Model: Underpinning Perspectives

The E3 approach sketched out in the previous section has certain key characteristics which differentiate it from research culture that is in vogue. The E3 approach presents a complimentary view on research and aims to extend the impact of the linear model in vogue. The following three perspectives are synthesized to recreate a model that can meet the demands of creating new knowledge as well as meeting the demand for impact of research findings and that underpins the ideation of the EEA approach:

Change Perspective

Innovation in educational practices is a necessity provided that the educational situations are all social situations involving knowledge and human interactions in different forms and ways and the situation is in a state of flux. Innovation is what makes the educational enterprise dynamic in nature.

One of the key roles of research is to create such innovations and make it operational at the ground level. The linear model presents a situation where the need for innovation is justified by the researcher, certain innovation designed and experimented and the results disseminated in different ways finally adding to the repertoire of data base. The innovation is expected to be incorporated into the suggestions and recommendations that pour down from those at the top in educational hierarchy. This is the usual course of knowledge transfer in the linear model of research.

However, change cannot be imagined as sort of quantum leap by the practitioners. Change is gradual in nature and it evolves smoothly when the change originates and spreads at the ground level. The intervention for change innovated at the research level needs to embed in ground realities as well as include the ultimate beneficiaries of the innovation. It has to evolve in a holistic, embedded and participatory mode. Implementation of the intervention and its refinements at the basic level is to be seen as a gradual process of evolution imbibing the necessary ingredients for evolution from the ground realities. Interventions are not something that are planned single handedly by someone from the validated through simple statistical rules. Rather it is more iterative and revisionary in nature where several rounds of inputs at the ground level are incorporated into the intervention to make it acceptable and motivationally sound to ensure change. It should be emphasized that the usability and acceptability aimed at by the innovation "is not achieved in one jump", rather it involves "reflective modification" through series of experimentations (Subelli and Dede, 2001).

Thus, innovation through research needs to be a process of gradual evolution wherein the innovations are designed, implemented, redesigned and reused in a way that the contextual factors including the practitioners' perspectives are built into the conclusions that will be finally arrived at.

User Perspective

The evolutionary nature of educational change eventually establishes the rationality for some form of collaboration in the research process. Most of the basic researches in the field of education are the investigations that the researcher carries out as an outsider. The practitioners have taken either as subjects of their investigation or as second layer consumer of their outcomes. The users/practitioners perspective is overlooked as the methods involved in validating the intervention are considered as necessary as well as sufficient condition for the validation of knowledge and hence recommendation for use by the practitioner.

On the contrary, the very nature of change as enumerated in the previous section establishes the need for a research model that takes into consideration within perspective along with the without perspective brought in by the researcher. In short, the element of some forms of collaboration is needed in the research model if the usability or impact or transferability at ground level is the real standards for quality of research. A collaborative research is one where the researcher and the professionals are engaged in a sort of collaboration in which both are engaged in the inquiry as partners although the degree of involvement of the practitioner in the collaboration may vary (Rai, 2010).

Collaboration in research has the potential to bring in new perspective in the research and at the same time fosters the sense of ownership among the practitioners as the actual users of the knowledge. Including the practitioners' perspective, further bridges the gap between the theoretical and practical aspect of research outcome. The interventions and innovations are well grounded in actual professional context on the one hand and the implementation of the research findings are ensured on the other hand. The researcher at least gets the surety of implementation of their innovation at the most fundamental level even though initially at a very small level. Nevertheless, the use of knowledge even at the smallest level is better situation than that in which the potential use of knowledge is merely confined within the boundaries of academic referencing.

Thus, a sort of collaboration is invoked in the entire research process. Knowledge is being created, but now it is also being used and reshaped. Such element of collaboration and the embedding of the problem into ground reality of educational professionals is what characterize the new model and makes it complimentary to the linear model in vogue. The practitioner benefits by the changes that are brought about in their professional expertise. The researchers create knowledge about innovation designs as well as principles involved in designing the innovations. These feedbacks are then more grounded and practical for the policy framers.

Such embedded problems and their solving in a collaborative way is expected to make the research worthy of the time and human resource being spent. It emancipates the research output from the confined space of a written thesis and some communicated papers derived from the same confined into the pages of this or that journal and rather make it more contributory in bringing about change even though at a very micro level. The conviction of the author is that a micro-level actual change is more worthy in the present day scenario than a macro-level potentiality for change. This change in attitude is further supported by the fact that the half-life of knowledge itself reducing drastically and use of knowledge is more important rather than adding on to the stack of propositional knowledge in hope of it being used in future.

Methodological Perspective

Another significant perspective that adds to the ideation of EES model is a methodological perspective. An embedded and engaged research culture demands a shift in the overall approach

to think of intervention that aims to bring about change and the validation of the same. Most often the interventions are designed by the researcher based on some theoretical considerations, tested in one shot and the knowledge disseminated for further use. Since the new approach is an engaged and embedded approach and it gives due importance to both the theoretical as well as practical inputs into the intervention, the one shot method (often in form of experimental and quasi-experimental design) is not suffice to bring about the desired change at the desired level. To be more precise, an alternative method is needed.

One suggestion that has recently gained currency in the contemporary academic parlance is the design research approach in education. Plomp (2013) describes Design Research as a research approach that aims "to design and develop an intervention (such as programmes, teaching learning strategies and materials, products and systems) as solutions to a complex educational problem as well as to advance our knowledge about the characteristics of these interventions and processes to design and develop them or alternatively to design and develop educational interventions (For example, learning processes, learning environments and the like) with the purpose to develop or validate theoreis" (Plomp, 2013, p15).

Such design research approach involves the practitioners and is both process and outcome oriented. It is process oriented since there is an intricate interaction between the researcher and the practitioner in designing and redesigning of the intervention. Thus, the process of creating and refining the intervention is equally important as the final version of the intervention has been attained. It is the process of finalization of the intervention that brings about actual change in the mindset of the practitioners and motivates them to owe the interventions and change.

Design research approach meets the criteria of engagement as well as embeddedness of the new model. The intervention and implementation of the same is now not a one shot programme rather, it extends in time involving a series of interaction between the researcher and the practitioner on the one hand and a series of small experimentation with the designed and redesigned interventions on the other till a satisfactory level of intervention design is agreed upon. The Design Research Approach has thus, the benefit of bringing about actual change in the professional context including professional practices. The outcome of the research is both a knowledge artifact in form of intervention that is relevant for use in the particular educational situation on the one hand and in form of certain principles that are learned and established as relevant for designing of interventions and that can be disseminated at a macro level for use by other professionals and researchers in their professional development programme or research venture respectively. However, the theoretical rigor that guides the linear model of research is of equal importance in case of design research as well.

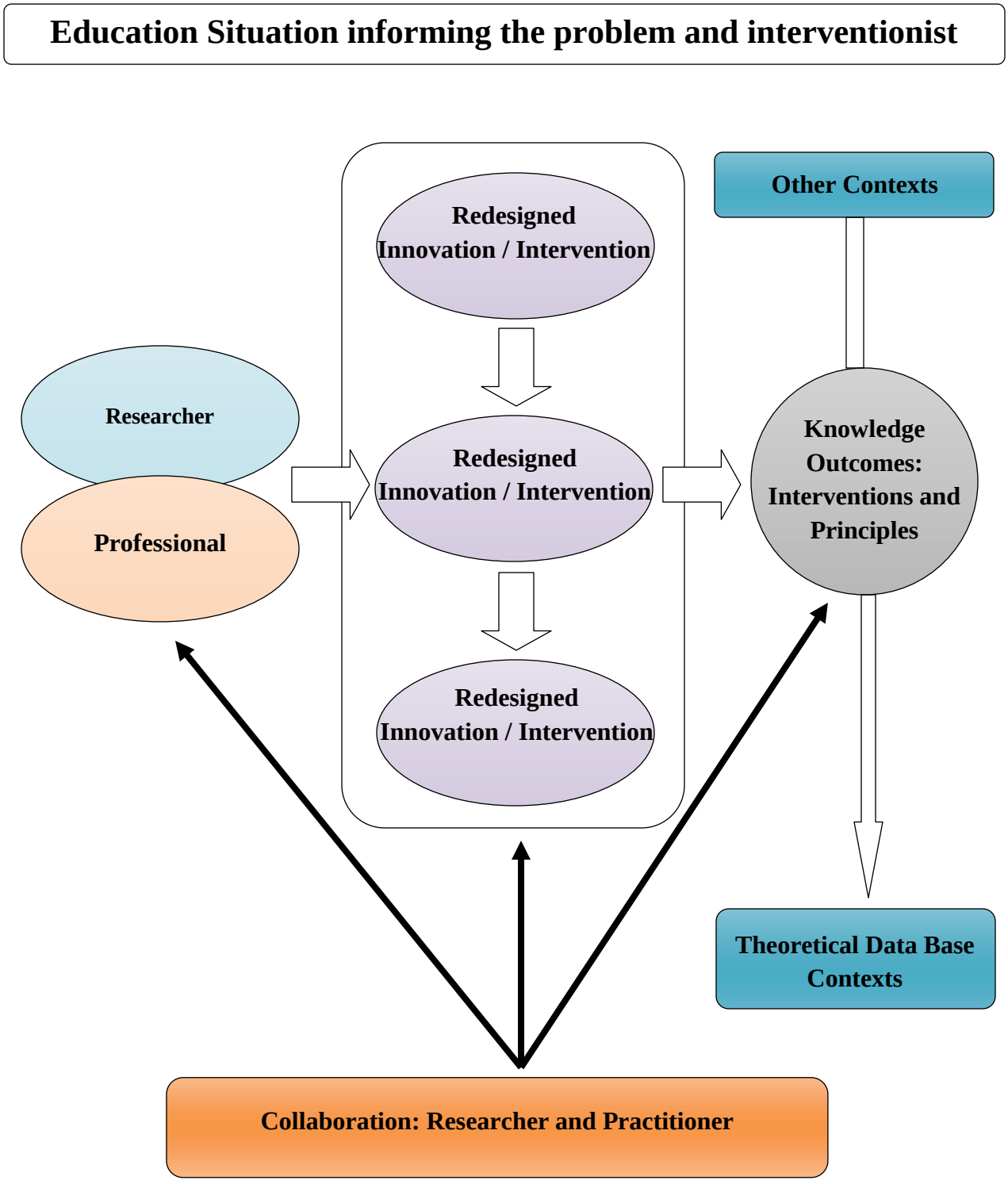

Figure: Embedded and Engaged Model for Research

Concluding Remarks

The researcher finds themselves coping up with two demands of maintaining the methodological and academic rigor in their work on the one hand and ensuring impact of their research output on the other. The contemporary research culture in vogue promotes research projects "driven mainly by goals of contributing to the accumulation of scholarly knowledge" (Subelli and Dede, 2013, p.12) with due respect for the academic rigor of method. The researcher's entanglement with the rigor of research methodologies has somehow led to overlooking the significance of the practitioners as partners in the research venture and, hence, the same research culture has led to the waning of the research impact that is an equally important concern for research academia. A more synthetic approach is needed where both the parties can realize significance of each other in their professional enrichment, of course, without demeaning the respect for methodological rigor.

A complimentary approach in form of E3 approach is proposed wherein the creation, validation and use of knowledge is seen as a collaborative effort rather than considering the dissemination of knowledge to the practitioners as "a secondary responsibility of the investigators" (ibid, p.12). The E3 Approach is suggested to consider the use of knowledge in solving educational problem as the central driving force from which theoretical gains are to be obtained –an approach in reversal of the approach where research is often guided by quest for theoretical understanding. The proposed approach advocates for an increase in the share of the practice oriented research i.e. engaged and embedded research in the overall research culture in the field of education. The approach is not a new one in the field of education and its advocacy is exhibited in the literature in various forms including part of the ideas presented in the paper (Wenger, 1998; Elliott, 2007; Rai, 2010). A paradigm shift is being advocated whereby the culture of practice oriented researches is being promoted to compliment the theory oriented research with an emphasis on making the research outcomes of direct use at the ground level. It is believed that the reciprocity involved in the co-created space on the research continuum can "create sustainable strategy for innovation in any nation's educational enterprise" (ibid, p.1)

Although the claims made regarding the E3 approach sounds as lofty ideals, nevertheless, they serve as stimulating ideas for those concerned with restoration of the relevancy factor in educational research. The ideas presented are yet in its nascent stage in the Indian context. Nevertheless, it is expected that further deliberations over the issue will inevitably emerge in the near future that may lead to a more matured and empirically validated model for research that can enhance the use of research knowledge by the practitioners and enrich the research culture in terms of its impact.

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