



Doing Quality Research: A Journey for Educators
การทำวิจัยให้มีคุณภาพ: การเดินทางสำหรับนักการศึกษา

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Abstract

The growing significance of multimodal information and communication systems have pushed the need for a more adequate research agenda on new teaching and learning practices as teachers, students and educationists engage in new forms of establishing knowledge, education and scholarship culture. This paper traces some of the dramatic developments taking place in the field of teaching and learning in Malaysia with a focus on the researcher's experiences encountered in working with different groups in education. Some of the issues discussed include doing quality research by asking relevant questions and working on issues that create social impact as well as appreciating research ethics. By way of conclusion, this paper calls for more collaborative research practices that involve several interest groups that will bring not only fruitful research and changes but also develop shared linkages, materials and human resources that contribute towards knowledge producing communities.

Keywords: Quality research, educators, teaching and learning in Malaysia

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บทคัดย่อ

การเปลี่ยนแปลงของระบบการสื่อสารและการเพิ่มขึ้นอย่างรวดเร็วของสารสนเทศ ทำให้การวิจัยทางการศึกษาต้องปรับเปลี่ยนตามไปด้วย โดยเฉพาะในประเด็นเกี่ยวกับการเรียนและการสอน อาจารย์ นักศึกษา และนักการศึกษาได้ให้ความสนใจในการพัฒนาความรู้ การศึกษา และวัฒนธรรมมากขึ้น บทความนี้ได้กล่าวถึงการพัฒนาการเรียนการสอนของประเทศมาเลเซีย หลายประเด็น โดยผู้วิจัยได้นำเสนอประสบการณ์การทำงานด้านการศึกษากับผู้คนหลายกลุ่ม และกล่าวถึงแนวทางการทำวิจัยให้มีคุณภาพ โดยเฉพาะการสร้างสรรค้งานที่ส่งผลกระทบต่อสังคมและการคำนึงถึงจรรยาบรรณการวิจัย นอกจากนี้ ผู้วิจัยยังได้กล่าวถึงประโยชน์ของการร่วมมือและการรวมกลุ่มกันทำวิจัย เพื่อให้ได้งานวิจัยที่มีความหลากหลายและเกิดการเชื่อมโยงและบูรณาการศาสตร์ต่าง ๆ เข้าด้วยกัน รวมทั้งทำให้มีการใช้ทรัพยากรร่วมกันอย่างมีประสิทธิภาพ โดยเฉพาะทรัพยากรบุคคล วัสดุคืบ และอื่น ๆ ซึ่งจะเป็พื้นฐานของสังคมวิชาการต่อไป

คำสำคัญ: การวิจัยเชิงคุณภาพ นักการศึกษา การเรียนและการสอนในมาเลเซีย

Introduction

We are living today in very exciting times where the proliferation of information technologies and the issues of teaching and learning are being addressed with increasing vigour by researchers and teachers. It has been highlighted that the work of teaching is a very challenging one. Indeed, we are uniquely placed in the sense that greater literacy, awareness, communication and education have given mankind the opportunity to learn from the lessons of the past and perceive avenues for action (Pandian et al., 2005a; Pandian, 2004a).



The past few decades revealed several dimensions of life, examples of the best of humanity and the re-appearances of our darker sides. We cannot forget the growth of collaboration, inventions, networking and social development in the world and we continue to see the worst of man in his capacity to nearly self-destruct through man-made wars and acts of violence, intimidation as well as through environmental degradation. We who have survived the horrors of the past century need to ensure that the lessons of the past have been well learnt and that the mistakes will not be repeated (Pandian & Shanthi, 2004; Pandian, Kell, & Singh, 2004).

It has been clear for some time now that we need new paradigms that will enable mankind to build cultures of comfort, security, dignity, independence, distinctiveness, growth and confidence. Such cultures need to be underpinned by a commitment to fundamental liberties, mutual respect, tolerance, non-suspicion and non-aggression. Malaysia has targeted growth and well-being for all through development plans like the Ninth Malaysia Plan, Vision 2020 and Islam Hadhari. We who are here can not only lay down the foundation; we need to also work towards the building of the citizens of tomorrow who in turn will ensure that visions become successful realities.

It is at this juncture that the arena of education becomes an important one. Today, there is an urgent need to understand education as more than the ability to read and write. Education embraces listening, speaking, reading, writing and critical thinking so that people can increase their capacity to think, create and question, in order to participate effectively in society (Kalantzis & Pandian, 2001).

Education becomes even more crucial now as we are conscious that we are entering a new global environment which will change our personal and social lives in dramatic ways. The modern electronic technologies—mobile telephones, televisions, audio and video streaming and the Internet—are prominent technologies in our daily lives. The teaching landscape will



have to respond to major shifts in line with the rapid developments in interactive systems, the Internet, mobile phones and multi-media multi-channeled netcasting (Lovat, 2003; Cope & Kalantzis, 2000; Pandian et al., 2005b).

The politics of language, culture and identity have also taken on a new significance and there is much debate on the directions of educational initiatives at both national and global levels. Language and cultural diversity has become a classroom resource just as powerfully as it has been and will continue to be a social resource in the formation of new identities and new communities in the present times (Pandian, 2002a; 2002b).

Education at the crossroads

The rapid changing learning context calls for more detailed studies into the existing educational practices among students and teachers at all levels of education to identify the constraints and challenges to the creation of new learning contexts. My research findings in the area of Malaysian education have highlighted the realities of the current learning and teaching practices (Pandian, 2003a). In the first place, it is heartening to note that a large number of students like English lessons and are aware of the importance of English, specifically in the workplace. However, general reading habits are weak, especially so when there are few students who enjoy reading books in English. In the case of teaching Mathematics and Science in English, it is evident that there are problems in explaining concepts in English among low English proficiency students and Bahasa Melayu is used in these classes (Pandian, 2003b; 2003c; Pandian, 2002a). The study on technology in the learning contexts reveal that students are exposed to a range of media like comics, radio, television and the Internet but their homework assignments require them to rely mostly on the print mode, especially in schools. There is very little e-learning and multimodal learning that takes place among students.



The scenario in the teacher training colleges and universities is different from schools where these groups of students use more computers and Internet-based programmes for completing their assignments. In light of changing workplace and literacy practices, the findings present a mixed picture where most teachers indicate that students are given problem-solving tasks, but field trips and the use of a variety of multimodal materials in the learning contexts is still low. In relation to social changes and literacy practices, findings reveal that many social issues are discussed within time constraints and syllabus limitations. Works from books, written language and teacher talk still dominate discussion in the classroom, particularly in the case of schools (Pandian & Revathi, 2004; Pandian & Narasiman, 2003; Pandian, 2002c).

The use of IT to help teachers and students accomplish tasks without comprehending what they are doing will only reinforce the existing narrow views of domesticating education. Traditional teaching and the transmitting of teacher-centred information to the wider learners will generate passive people without the capacity to critique and improved living experiences. As Kalantzis & Cope (2005) perceptively point out, the knowledge society requires creative individuals with the capability to critique, think, and study about learning and the ability to connect these learning activities to the different ecological and social problems that concern today's society.

Therefore, the research findings in many educational projects suggest that while much is being discussed and planned in transforming learning settings, the constraints and inadequacies of traditional schooling in the contemporary scenario still pose barriers to working towards transformed learning practices that will enable learners to adopt new ways of working, to enhance capacity to participate in civic life and to nurture personal growth (Pandian et al., 2003b).



Just like the changing world around us, we have to think of ensuring that our citizens would be prepared to use new information and communication resources to respond to real conflicts and problems. We have to embark on teaching and learning initiatives that work towards producing informed and knowledgeable persons, adept at using the tools of the information age for negotiation, problem-solving and decision-making.

We have to come to grips with a broad range of questions: Are we doing enough to equip our teachers and children for the challenges ahead? Are the systems of education in place to respond to the emerging social diversities in societies and to the new information technologies? What are the roles of parents, teachers, librarians, wider communities and education policy makers with regard to the growth of the new teaching and learning cultures?

The educational community has to rise up to confront the above questions. We need to explore ways in which we can design opportunities for students to develop quality research and education. In this information age, a person must be multiliterate, where the person has the power to encode and decode knowledge and meanings through a variety of symbol systems including:

- graphics in charts and graphs and interactive computer images that may simplify or complicate our lives;
- visual representation in the form of multimedia, television, film and advertising;
- mathematical and scientific symbols embedded in spreadsheets, databases and tables;
- musical symbols that shape the mood and background atmosphere; and
- printed and spoken language symbol systems which, far from disappearing, are being integrated into a larger array of symbolic environments.



It is time that we create social learning environments that foster collaborations and shared construction of meaning among classroom peers, online key pals and content area experts. One small idea can bloom quickly and transform conventional literacy practices to more creative ones. It is in this vein that the presence of graduate students who will lead research in this volatile and exciting arena of education is important. The agenda on research and education should address the needs of the individual as well as the family, literacy in the workplace and in the community as well as in the nation. We are talking about a new research framework: one that engages people not with just technical skills but also broad perspectives on the world of knowledge, its origins and development trends, its definitions of experience and social life, its potential for human emancipation and human domination and for growth and destruction so people can be the intelligent shapers of the information society and to humanistic culture.

As educators, teachers and administrators, we can form a positive force for progressive, quality and caring research and education. It is important to see this agenda on research and education as a journey, loaded with inevitable challenges, but the good news is that we cannot learn or be successful without them. I am certain that the researchers and scholars in this field of education are aware of their own potential for change and the ripple effect which they can have on other institutions and people.

Looking for Quality Research

Terms like education, learning and literacy today are concepts that theoretically encompass our entire lifespan, from birth to death. These terms emphasize the importance of all skills and branches of knowledge, using all possible means and giving the opportunity to all people for full development of the humankind (Cope & Kalantzis, 2000). The challenges facing



education today are multiple and intense. In this connection, the agenda on research becomes ever more critical given that we are confronting dramatic changes constantly within a short span of time where the learning person has to continuously update and re-construct the fields of learning and living (Kalantzis & Pandian, 2001). Malaysia currently faces challenges in creating a new multi-channeled learning environment where people study, connect and work with one another across classrooms, communities and country borders in so many exciting ways. Supporting research here is not just about transmitting knowledge efficiently and effectively; it is about paving innovative ways to focus on the digital economy, knowledge workers and lifelong learning that contribute to knowledge producing and cultural understanding that bring about capable, creative and critical societies (Pandian et al., 2005).

I would like to stress the importance of doing quality research in education where researchers spend the majority of their time reading papers, discussing ideas with colleagues as well as writing and revising papers. It is important to become part of a larger research community to keep track of where one is going and where one has been with his/her research so that we can produce high quality discernment of teaching and learning, using what is learnt to construct meaningful learning environments (Lovat, 2003; Malachi, 2004).

A complex critical mode of educational research takes cognizance of many different perspectives encompassing different disciplines of knowledge as researchers begin to discern the interconnections between ideas, physical objects, political decisions, social circumstances and the process of teaching and learning. In other words, research in educational settings is not initiated, organized or applied in a social-political vacuum. Historical, economic, political, organizational, professional and personal factors impinge on the selection of the research topic and the research process in so many ways. The wider socio-cultural factors will also govern what research is carried out and what findings are disseminated for public attention and



policymaking.

Asking relevant questions

I discuss quality research, drawing from my own research over the past years as well as my experience in student supervision. It may be useful to start a quality research by asking a series of questions such as “Why do we do research?”; “What is education research for?”; “Must education follow a single line of development or does a plurality of approaches produce more useful and wide-ranging educational results?”

Therefore, the first step in embarking on this research journey is to ask many questions. If one has been a teacher, he/she asks questions in the classroom. In our daily lives, we ask questions so that we can make sense of the experiences surrounding us. As a researcher, it is important to relate to the people in our field of research and to listen very carefully so that relevant questions are asked. In research, there is a different quality of listening so that the circumstances encompassing a real problem can be appreciated (McGinty, 2001; Peshkin, 2001).

Issues which create social impact

At a more personal level, we do research because we want to develop intellectual creativity that will improve our work routines and lifestyles and perhaps help with career development. Often, researchers embark on studies that replicate other research projects and produce similar findings without appropriating the studies to local concerns and contexts; thus, there is very little social impact.

We do research because we want to contribute to scientific knowledge and bring social impact that will better the living and learning experiences around us. In Malaysia, education is instrumental in nation-building and in promoting national harmony in a



multicultural society and this in turn has led to increasing school-based practitioners and university-based scholars to build bridges that will facilitate more effective research in schools.

Grounded in an ideology designed to bring about social transformation, it is critical that researchers encounter perspectives that will provide important insights on the teaching and learning environment, or platform where teachers and students interact to understand how relationships, hierarchies, and socially and culturally constituted practices operate in the classroom and in real life.

Building bridges to promote collaborative research

It is interesting to observe the ways in which school-based practitioners and university-based scholars have begun to build bridges with the surrounding communities as this facilitates more effective research. Partnerships that are fostered among key stakeholders like policy-makers, civil society organizations and community-based agencies will bring about renewed commitment, and this will in turn lead to concrete action strategies that support teaching and learning activities. School-university-community partnerships enhance professional learning and create new and more powerful forms of knowledge to inform teaching and learning (Darling Hammond & McLaughlin, 1995). In many cases, the researcher may find it useful to understand the particular issues that concern specific communities linked to the school settings that will bring relevant and interesting perspectives and the feedback from the communities can provide valuable input on the quality of research that is being conducted (Jennings, 2001). The collaboration process, whilst not always a smooth partnership, can still make for exciting explorations where the research process can extend boundaries, re-shaping our worldviews in meaningful ways.



Appreciating research ethics & Recognizing research politics

Research ethics protects the welfare and rights of participants in research and it is important that the research that is collected and stored has addressed elements of confidentiality, foreseeable risks, and that consent is freely given rather than coerced. It is also important that personal or sensitive information is not disclosed without prior permission. More importantly, it is crucial to ensure that the subjects of the research do not suffer from any burden or physical, mental, psychological and spiritual harm.

As the research project progresses, numerous challenges will be confronted. In field of education in order to have the project approved and funded by the Ministry of Education, the coordinators of research projects have to situate the research topic and its rationale within national goals. The research proposal will have to stress the need to reassess the present paradigms in education so that individual, national and global education movements could be connected to the social development, economic well-being and international cooperation in relation to the Malaysian context.

The research available for any project will impinge on the scope and the depth of the research. In Malaysia, issues in science and technology and commercially viable research are given top priority. Research funds for the arts and social sciences are scarce and come from very few sources, namely the government, universities and research foundations.

Funding from the government is usually for research that is mission-oriented and for political uses. Such research is highly useful for persuasive and informational impact. The mission is attained when the research produces findings that are of rapid and direct use in promoting and achieving certain practical aims.



Funding from the university allows some autonomy for the researcher to frame the research objectives and design. Universities offer different grants which include short-term and long-term grants. The long-term grant is awarded to research that falls under highly prioritized areas linking explicitly to the immediate needs of the government. The funding body at the university, however, imposes some guidelines for the approval of the research applications. The long-term grant is awarded to research that engages with the identified areas of prioritised research that are noted in the Malaysia Five Year Plan.

Staffing and Collaboration

Bulmer and Warwick (1993) note that political considerations may also enter the selection of research staff participating in the study. In some collaborative research projects, members may agree that the project would focus on continuity, changes, challenges, habits, beliefs and values associated with education through all phases from preschool to tertiary. Still, the research members can collaborate and produce a rich study when multidisciplinary perspectives are included. A major achievement for research projects can be attained if scholars come from different backgrounds, cross borders to meet on a single platform that would enable team to learn and broaden the parameters of understanding education.

Further, researchers can work hard to establish global relations in the domain of education so that they can network and build shared interests as well as community contact to enhance activism in this area. Apart from making institutional links, connection can be made with individual and social groups working on international education-related projects to increase the participation and collaborative endeavours for the advancement of knowledge for the promotion of better global understanding of educational needs for the twenty-first century.



The collaboration initiatives cannot be managed without problems. The researcher has to be careful that the partnerships are characterized by equity and reciprocity and that the contributions from the various groups and individuals critically address the issues confronting the educator working on educational research and activism.

Negotiating Access

No researcher can demand access to an institution, an organization, or materials. It is important for the researcher to convince the relevant organizations, education officials, administrative officials, school heads and teachers of the value of research.

In Malaysia, this is perhaps a major challenge as far as research in educational settings is concerned. As asserted earlier, a formal approval has to be obtained from the Ministry of Education, State Department officials and school heads. In this regard, the researcher often has to confront some form of bureaucratic politics. Further the research on different ethnic groups will also mean that the politics of access will be highly complex and officials have to be convinced that the data would not be used to threaten ethnic stability. Care must be taken not to give the ethnic dimension a necessary high-profile treatment in the negotiations with the Ministry of Education.

Discussions need to be undertaken with the Ministry of Education and the potential contributions of the research must be emphasized. The tight government reign over information in the form of legislative control pose further difficulties in conducting research in this area. The Official Secrets Act (1986) means researchers need not be given complete access to controversial papers and documents that are restricted from public scrutiny. In Malaysia, researchers have to exercise patience, tact and persuasiveness to get their projects accepted and to be given access to various schools as well as to important documents. It is also important to ensure that good local contacts are maintained and a certain amount of understanding and trust



is established with the educational agencies involved in the project.

One of the strategies that I have used in my projects was to collaborate with key officials supportive of the research aims and values. In the regard, the collaborative relationship forged with the State Education Department helps to enhance the significance of the project in the country. This collaboration did not influence the conceptualization and research design or the interpretation of the research findings. The partnership ties came in helpful in the organizing of a national seminar and an international conference that was built into the overall literacy research project. It also encouraged an active exchange of dialogue and built bridges between researchers, educational administrators, teachers and policy makers for the mutual understanding and sharing of knowledge. Given that the Malaysian Education system is normally directed by a centralized bureaucracy, the Project Team also felt that room for progressive voices and action for the people directly involved in the educational encounter at other levels was crucial. And this activity could be animated in organizing a conference that would allow for interpretation and dissemination of findings to be shared with all those concerned with literacy issues.

Interpretation and Dissemination

This is perhaps a crucial stage in a research process since how the data is interpreted and disseminated will reveal the significance and quality of the study. The organizing of an international conference and the publishing of conference publications emerged as important channels to enable contemporary debates on education to be heard by education groups at the national and global levels. The researcher must give attention to dissemination of ideas and project findings for public debate and policy making. Conferences and publications serve as an important forum that enable researcher, education officials, teachers and other participants to



define for themselves, with a sense of confidence, individual aspiration and avenue for growth in relation to educational practices.

Again, it may be useful here to stress that despite the sensitivity surrounding educational issues, such dialogue and activism of literacy may be possible at some points in time. In more difficult times (like the last period of economic and political crises faced by the Asian governments) any criticisms toward the status quo would not have been tolerated and perhaps would have also invited reprisals from the ruling government.

Conclusion

The growing significance of multimodal information and communication systems have pushed the need for a more adequate research agenda on new social practices – ways of working in new workplaces, new ways of participating as citizens in public spaces and in new forms of establishing identity, lifestyles and personality. The Malaysian education terrain has conceived many plans and initiatives that would equip students of the new millennium with the necessary knowledge, creative and thinking capacities and communicative and multi-literacy skills they would need to negotiate in the increasingly diverse worlds that they inhabit.

The transformation of learning settings is becoming increasingly important and the move towards the knowledge society would demand that we problematise our ideas and practices in the arena of literacy and address life-long learning and other new demands of learning issues that are suited to specific needs. Evidently, the changes in the learning process have to be supported with proper policy measures at the national level involving the government as well as interested parties at the local levels. Providing better access to computers is an essential first step. It is also important to transform management of teaching institutions. More importantly, there is a need to change the role of teachers and educators and the need to situate the learning process within the needs and interests of the society so that learning becomes



meaningfully connected to the societal needs of the information society. This will, however, mean more research that will engage greater linkages and networking with the Malaysian educational authorities in terms of sharing of this idea, materials, information and the training and human resources development programmes that need to be conducted. Only through this, will it mark the beginning of a life-long learning process that will enable researchers in our communities to become not just passive spectators and consumers that of knowledge, but reflective and active knowledge producing citizens of the world.



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