Part One

Orientation to Researching Real-World Problems

1 Researching Real-World Problems



This introductory chapter argues the relevance and need for research that grapples with real-world problems. It discusses the practical and 'applied' nature of most research projects and highlights the challenges and payoffs associated with research that attempts to address significant real-world issues.

Chapter Preview

Grappling with Problems
The Role of Research in Problem Solving
The Potential of Researching Real-World Problems
The Challenge of Researching Real-World Problems
Preparing to Make a Start

'We are at the very beginning of time for the human race. It is not unreasonable that we grapple with problems ... Our responsibility is to do what we can, learn what we can, improve the solutions, and pass them on.'

- Ríchard Feynman

GRAPPLING WITH PROBLEMS

You've probably already picked up on this, so I don't think I'm telling you anything new, but in case you hadn't noticed – the world is not a perfect place. Problems abound.

Governments are riddled with problems – in fact, governments themselves are a problem! The environment's a mess. Our planet is turning into one giant greenhouse, there's salinity in the soil, and we don't have enough clean/safe drinking water to go around. In fact, we can't find a way to distribute money, food, or medicine so that everyone with a need can get a share. Health care and education are far from adequate and/or equitable, and from the global arena to the local playground we can't seem to overcome racism, sexism, prejudice or discrimination. Domestic violence and child abuse occur daily in every corner of the world, and child pornography is a multi-billion dollar industry.

We also have to deal with the threat of terrorism as well as our fear of that threat. We poison ourselves daily with toxic chemicals – from alcohol, cigarettes, factories and automobiles. Children are starving – some due to war and political

upheaval – some from mass media-induced anorexia. Meanwhile schools struggle with violence, drugs, sexual and racial tension.

And don't get me started on the workplace ... Did you know that more than 5,000 people die every single day due to work-related accidents and disease (International Labour Organization 2005)? Meanwhile, we 'survivors' deal with significant stress from the boss, massive bureaucratic inefficiencies, gross inequities, and the need to balance work with a thousand other responsibilities.

Yep – there are a lot of real-world problems we can grapple with.

From problems to problem solving

Now that may sound pretty depressing, but don't despair. We may live in a world plagued by problems – but we also live in a world dedicated to learning, changing, improving and evolving. Yes, problems abound – but so does problem solving and problem solvers. We are part of a world surrounded by people who work in government, in education, in health care, in big business, in small business, in the community, in academia etc., all dedicated to doing their part to ease, fix and alleviate problems. In fact, we live in a world where most struggle on a daily basis to solve problems in order to make the world, or at least their world, a better place. So okay, we may never live in a problem-free world, but at least we can say we live in a world where alleviating problems will always be high on the agenda.

THE ROLE OF RESEARCH IN PROBLEM SOLVING

So what is the role of research in problem solving? Well, research is the process of gathering data in order to answer a particular question(s); and when researching real-world problems the questions asked generally relate to a need for knowledge that can facilitate decision-making, thereby aiding problem resolution.

Does this then make research the answer to our problems? Well unfortunately no – but research can be an instrumental part of problem resolution. Research can be a key tool in informed decision-making. It can be central to determining what we should do, what we can do, how we will do it, and how well we have done it. Research may not be the answer to our problems, but it can supply some of the data necessary for us to begin to tackle the real-world problems that challenge us all.

Take change management literature as an example. It will clearly tell you that in order to make change happen – in order to solve problems – you need to:

- *understand the problem* including all the complexities, intricacies and implications
- be able to find workable solutions vision futures, explore possibilities
- work towards that solution implement real change
- evaluate success to find out if problem solving/change strategies have been successful

If you think about it, all of these activities can be, and should be, informed by research. Research can be the key to finding out more, that is, uncovering and understanding the complexity of real-world problems. It can also help us in our quest for solutions. It can be key to assessing needs, visioning futures, and finding and assessing potential answers. It can also allow us to enact and learn from change through use of 'action research' strategies. And finally, evaluative research can be central to monitoring and refining our attempts at problem solving. In short, research may not be the answer – but it's certainly a tool that can help us move towards problem resolution.

Researching practical problems

Precisely because (1) there are so many 'problems' out there, (2) there is a true dedication to problem solving from global to local scales and (3) research is recognized as central for effective and informed decision making, there is a real call for 'applied' research, or research expressly designed to contribute to solving practical problems.

Now keep in mind that while we would all like to save the world's children from hunger, do away with the evils of terrorism, or put a stop to religious persecution, not many of us will be in a position to fully address these types of problem through research processes. Generally speaking, researching real-world problems will see you engaged in problems, or aspects of problems, that while still important and significant, are local, grounded and practical. Researching real-world problems is doing research that responds to real and tangible every-day needs. So whether it be local or national government, non-government organizations, aid agencies, communities, corporations, or in fact any workplace, if there are problems to tackle, then there is a need for research that can aid problem resolution.

So who can benefit from research that tackles real-world problems? The list is endless. For example:

- ☑ **Educators** trying to improve their practice, trying to bring equity to a school system, trying to motivate students, trying to get a handle on bullying ...
- ☑ **Nurses**, who know their insights can make way for better practice if they can only find a way to be heard ...
- ☑ **Doctors**, at least the few out there who don't believe they already know it all!
- ✓ **Communities** trying to deal with adolescents with nothing to do but hang around, or trying to protect a local park from corporate development ...
- People working in local government, who want to listen to community needs, improve the state of the environment, improve community facilities ...
- ☑ **Social workers** trying to get a handle on the problems facing twenty-first century families, the unemployed, and the abused ...

- Managers trying to improve what they do and what their company offers, trying to provide safe, healthy, stress-free workplaces, as well as trying to increase profits ...
- ☑ **Aid agencies**, who recognize the value of listening before acting, or those who need to know if their programmes have worked ...
- ☑ **Governments**, who recognize the need for research that can contribute to major public policy debates ...

THE POTENTIAL OF RESEARCHING REAL-WORLD PROBLEMS

'We are continually faced with a series of great opportunities disguised as insoluble problems.'

- John W. Gardner

There is a good reason why so many people are interested in conducting research into real-world problems. And that's because the findings, results and conclusions can lead to practical recommendations, genuine change, great opportunities, and real problem solving. As shown in Figure 1.1, research into real-world problems can, and should, open possibilities for change on a number of levels.

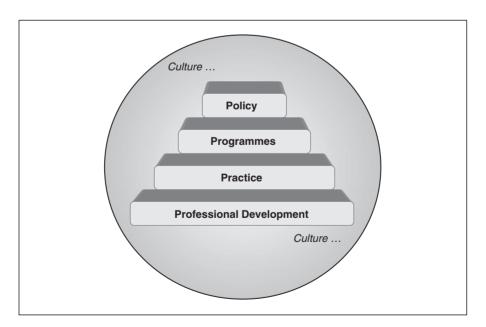


FIGURE 1.1 HIERARCHY OF CHANGE

Figure 1.1 depicts a hierarchy of change with a foundation based on professional development. The thinking here is that the process of conducting research is in itself a learning journey that should have an impact on the researcher; conducting research *is* professional development. The next level up is research that can impact on practice; it is research that can provide data that will allow individuals, organizations, or communities to reflect on, and refine what it is that they do. Moving up another level is programmes. The emphasis here is on a more systemic attempt to change the projects, procedures, plans and strategies used within organizations and communities. And finally, sitting above programmes is policy; here the research goal is to make a contribution to broader guiding principles. It is research that can help set new directions.

Now you'll note that encompassing this hierarchy is a circle labelled 'culture'. The thinking here is that if research is used as a tool for professional development, and can improve practice, programmes and policy, you're likely to see an influence on the culture of an organization or community. In fact, research at this level can help change the ethos of organization so that it is in a position to embrace learning and change.

Professional development



Whether you are a practitioner or an outside researcher, conducting research into real-world problems should always be a path to professional development. Conducting research into real-world problems allows you to:

- Engage in 'problem-based learning' the thinking behind problem-based learning (PBL) is that the best starting point for learning is working through a problem that needs to be solved in a hands-on fashion. The learning here is 'double loop'. Not only do you learn about a problem you are exploring you also learn how to tackle that problem, hopefully in a manner that will allow you to transfer problem solving skills to a variety of new challenges. The nature of conducting research into real-world problems embeds problem-based learning into the research process.
- Engage in 'action learning' Kolb (1984) stressed the importance of the creation of knowledge through 'transformation of experience'. He suggested that experiential learning is dependent on cycles that include: (1) engagement in real experiences (concrete experimentation); that need to be followed by (2) thoughtful review and consideration (reflexive observation); as well as (3) broader theorizing (abstract conceptualization); and (4) attempts to improve action (active experimentation). Such processes are embedded in various aspects of conducting research. To 'do' research into real-world problems is to engage in cycles of action learning.
- Enhance communication skills gathering credible data is not a task for the shy
 or faint-hearted. It is a process that is highly dependent on your ability to

communicate with others. Whether it is the challenge of gaining access, conducting interviews, or engaging in participant observation – boosting your communication skills is often a side benefit of doing research.

- Develop research skills I know I write research methods textbooks, but I'll still tell you there's only so much you can learn from 'reading' about the conduct of research the real learning comes from the 'doing'. Without a doubt, it is reflectively conducting research that will teach you how to do it.
- Produce new knowledge you will find out something. You will hopefully get
 an answer to your research question. You will have produced new knowledge that can make a contribution to problem solving.
- Engage in, or facilitate, evidenced-based decision making it's a really good feeling to know that commonsense, practical decisions are being influenced by data you generate. And, of course, if you are researching within your own organization and are in a position to make decisions yourself, then all the better.
- Offer a pathway for gaining academic qualifications or getting a raise perhaps
 these goals are not as noble as the learning objectives above but let's face it,
 this kind of stuff is often important to us. It is worth considering whether
 researching real-world problems can be embedded in both academic programmes and/or workplace performance measures.

Practice



The level above professional development is research that can modify practice. And this is exciting, because you get to see the fruits of your research labour. If you are conducting research into your own practice, or practices within a particular organization/community, one of your research goals will be to gather data that

can be instrumental to your ability to either: (a) modify, refine and improve what it is that you do, or (b) make recommendations that can influence the practices of others within a particular setting.

This is often a defining element of research into real-world problems. There is an express goal of facilitating problem solving by providing information for effective decision making related to practice. In working towards this goal, research can be used to:

- Assess a problem situation sometimes called a 'needs assessment', this type of
 research attempts to provide an overview of a problem situation with a view
 to determining the need for new practices.
- Assess/trial/evaluate 'new' practices this might involve research that attempts
 to: (1) explore the strengths/weaknesses and costs/benefits of new ways of
 'doing'; (2) trial new practices through an 'action research' framework, something quite common in the education sector; or (3) evaluate the success/failure
 of new practices.

Programmes



Moving up one level on the hierarchy is research that can impact 'programmes'. Now while practice refers to what individuals 'do', programmes refers to more planned, organized, structured, or defined approaches to the operations, projects and strategies used within an 'organization'. Research at this level can help

make convincing arguments for systemic change. For example:

- Assessing need as with 'practice', research into programmes is often aimed
 at 'needs assessment' in which problem situations are explored. But in this
 context, it is explored with a view to determining the need for a particular
 'change intervention' programme.
- Assessing potential programmes also known as 'feasibility studies', this type
 of research attempts to explore the strengths/weaknesses and costs/benefits
 of particular programmes. Studies might look at whether a programme is
 likely to be accepted by stakeholders; whether there are likely to be problems
 with implementation; and/or look at the success/cost of such programmes in
 alternate settings.
- Programme review often referred to as 'evaluative research', studies of this
 type are conducted to assess the effectiveness of change intervention programmes, and are considered central to rational and informed decision making.
 The thinking here is that whether it is a new teaching curriculum or a healthy
 lifestyle campaign, unless the level and effectiveness of change can be
 assessed, it becomes impossible to know: (1) if the strategy was successful;
 (2) whether it is cost-effective; (3) whether it should be continued; (4) whether
 it needs to be modified; or (5) whether it should be expanded.

Policy



Policy can be defined as 'a plan or course of action intended to influence and determine decisions, actions, and other matters'. In other words, policy has the potential to direct what sits below it, which is precisely why it sits at the top of the hierarchy. Now, the goal here remains the same – making a contribution to problem reso-

lution. But research at this level attempts to do so by producing knowledge that can impact an organization's strategic plans, aims and objectives, and/or mission statement. It is research aimed at producing policy recommendations that can help alleviate problems/problem situations.

Just a few examples of policy that can be influenced and even developed through credible and rigorous research include:

- a school's dress code policy or policy on gender equity
- a workplace's policy to offer in-house child care or increased maternity/ paternity leave

- a government's policy on pollutants/emissions or its policy on gun control
- a local council's urban development plan or policy related to encouraging small business
- a hospital's policy on shift work or policy related to decreasing workplace

Now keep in mind that moving from research to policy development is not as straight forward as moving from research to professional development or even from research to individual practice (where you have a high level of control). As you move up the hierarchy of change, your ability to make change happen through research – to have findings lead to action – becomes ever more challenging. Yes, you can argue that there should be a strong correlation between rigorous research expressly conducted for policy development ... and the development of policy (that would make sense). But the development of policy is also likely to be influenced by factors other than 'findings'. Power, politics, public will and perception, and of course money, will all play their part.

Culture



Finally, encircling the entire hierarchy is 'culture'. Now research aimed at any level of the hierarchical structure has the potential to influence an organization's culture. Whether it be research undertaken by individuals for professional development or improved practice, or research undertaken by an organization in

order to impact programmes and policy, the conduct of research itself can give a sense of empowerment and control in creating futures. In fact, the development of a research culture can be reflective of a move towards a 'learning organization', or an organization where '... people continually expand their capacity to create the results they truly desire' (Senge 1994, p. 3).

Research can facilitate such a cultural shift in two ways. First, research findings themselves may suggest the downside of the current culture and/or the benefits of an alternative culture. For example, research findings might suggest that a shift from a top-down to bottom-up ethos, from dictatorial to democratic management, or from profit-driven to people-driven philosophy (and hopefully not those shifts the other way around!) are needed for increased productivity and/or job satisfaction.

Second, the conduct of research itself, particularly if driven by practitioners within an organization, can herald and facilitate a cultural shift towards values that include listening, learning, empowerment and dedication to change – something many feel is a necessity in the twenty-first century. In fact, as we begin to reflect on the legacies of modernization, globalization and industrialization, many are asking if we need to re-examine the cultural ethos that has dictated our current path.

THE CHALLENGE OF RESEARCHING REAL-WORLD PROBLEMS

'The real world is not easy to live in. It is rough; it is slippery.'
- Clarence Day

Undoubtedly, the grounded, practical and applied nature of researching real-world problems is precisely what makes it such a rewarding endeavour with so much potential. On the downside, however, research that aims to offer readily applicable findings must meet the challenges that come from the complex and messy environments in which real-world problems sit.

Thus if the real-world is 'rough' and 'slippery', as Clarence Day would suggest, then you can rest assured that conducting research on real-world problems is not likely to find you with solid and sure footing. You need to be ready for challenges, obstacles and hiccups of all sorts.

Complexity of real-world problems

'I have yet to see any problem, however complicated, which, when you looked at it in the right way, did not become still more complicated.'

- Poul Anderson

Problems are amazingly complex things. What might appear straightforward at first glance can have a plethora of complexity hidden right below the surface. As shown in Figure 1.2, even a simple problem will have multiple facets or dimensions that include economic, bio-physical, cultural, social, political and personal elements.

Take schoolground graffiti as an example. Say you want to know why it's so hard for a school to put an end to the practice. Well if you wanted to explore all the relevant literature you'd have to travel down quite a few paths. First, you would need to recognize two distinct perspectives related to this problem: (1) understanding why students want/need to engage in this practice – particularly in the face of a school system trying to curtail it; and (2) why schools see this as a problem and are unable to find a way to curtail the practice. These two perspectives will then lead you into facets of the problem that are: *economic* (anything from the need to understand a possible culture of poverty ... to an estimate of the actual expense associated with an effective anti-graffiti campaign); *biophysical* (from what alternatives there are for youth to express themselves visually ... to how difficult it might be to secure the school grounds); *cultural*

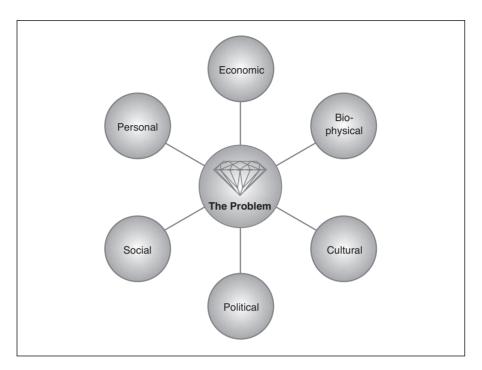


FIGURE 1.2 THE MULTI-FACETED NATURE OF REAL-WORLD PROBLEMS

(understanding youth culture, free expression, and/or a possible associated disrespect for authority); *social* (understanding issues of peer pressure); *political* (from understanding playground hierarchies ... to understanding school system politics that prioritizes what and how problems should be addressed); and even the *personal* (perhaps a students or students hold a vendetta against a particular teacher or even the school).

And these dimensions are not limited to graffiti. In fact, I could have picked just about any problem and outlined its multiple facets; all real-world problems are nested in real-world complexity. So whether the problem you want to address lies in your own professional practice, in a management system, in a polluted waterway, or in a community, as a researcher it is your job to be ready to face, unravel and work with multifaceted complexity.

Conducting research in the 'field'

Now there is nothing like a controlled environment for conducting research. You can test relationships between certain variables, make sure there is nothing that will confound results and in the end make some definitive statements about what's what. But that's not the way real-world problems work. In fact, much of the reason we struggle with such problems is precisely because they are multi-faceted

and embedded in messy real-world contexts. Real-world problems, however, do occur in the real world, and that is exactly where they need to be researched.

This raises an array of challenges, for example:

- the need to keep methodological designs flexible
- the need to engage in multiple methods
- the possibility of not being able to account for all variables
- managing your own experiences, insights and biases
- developing empathetic understanding of your full range of stakeholders
- prejudices towards you as a 'researcher'
- the need for highly developed social/communication skills
- being prepared for an array of real-world contingencies without adequate time or money

The payoff, however, is that if you recognize and are able to grapple with multi-dimensionality and messy contexts – and you can still come up with credible findings, conclusions and recommendations – they are much more likely to be realistic, practical, usable and sustainable than any 'tidy' results produced in a closed environment.

Defining a research team

To add to this complexity, and perhaps because of it, researching real-world problems demands reflexive consideration of who is best suited to undertake a particular research project. Now most problem-based research will be driven from an organization, often a workplace – for it is in the course of day-to-day work or within a job description itself that many problems are recognized and dealt with. The question is whether those within the interested organization decide to undertake the research themselves or decide to commission an outside party to do the work.

This means that researching real-world problems can be undertaken and/or managed by: (1) practitioners themselves; (2) 'professional' social or applied science researchers; (3) students – ranging from undergraduate project students to PhD candidates (some of whom may also be practitioners); or (4) a team made up of some combination of the above.

The practitioner

There are plenty of cases where a community member or a workplace practitioner will be the driving force/key researcher for a particular project. A practitioner might personally undertake the conduct of rigorous research in order to:

- carry out a small-scale project that management has determined should be handled in house
- address a pressing need for which there is no external funding

- facilitate best practice in evidenced-based decision making
- evaluate and modify their own practice
- fulfil obligations in their job descriptions
- meet requirements in undertaking a higher degree

The key here will be dedication to credibility through the development of knowledge and skills necessary for the conduct of rigorous research. Now we all know managers who might try to justify some controversial decision by saying something like, 'Well, I've actually done research into this', and proceed to tell you their opinions, or offer a few anecdotes. This is *not* what I am referring to when I talk about practitioner-based research. For me, practitioner-based research is engagement in a rigorous research protocol with a clear goal of obtaining credible data and producing trustworthy results. It doesn't have to be the biggest, most comprehensive study in the world, but it would need to be a study that stands up to the criteria of good research (as highlighted in Chapter 4).

The social/applied science researcher

There is also a role for the 'professional' in researching real-world problems. A workplace might turn to a government or non-government agency for assistance in conducting necessary research. This might involve soliciting the assistance of a(n):

- government department such as a Department of Education or Ministry of Health
- aid agency such as the World Health Organization, OXFAM, or the World Bank
- *university* many have exceptional research profiles
- market research company who can offer services that can extend beyond who
 will buy what. Reader's Digest Australia, for example, recently used the services of a market research company to conduct a survey in which teenagers
 gave their parents an overall 'report card'

Another alternative is that a 'professional' researcher may be interested in a particular problem situation and want to drive the research process. The 'professional' will look to work collaboratively with local governments, industry, community, schools, health care system, etc. in order to seek funding and conduct relevant research.

The student

From undergraduate to PhD, students can be instrumental to the conduct of rigorous research into real-world problems. Many upper-level undergraduate research methods subjects, and subjects targeting eventuating professional

practice, require the conduct of a small-scale research project. And of course, research on a larger scale is required for Master's and PhD candidates. Now while some Master's and PhD theses will be highly theoretical in orientation, many others will attempt to address real-world problems at a very practical level. This is exciting because not only can such projects enhance personal learning, they can also make a real contribution to the production of knowledge and genuine problem solving. Students researching real-world problems have the opportunity to:

- learn the skills related to the conduct of research
- learn about the realities of working with others
- explore the politics and power of research
- make a real contribution to knowledge, problem solving and situation improvement

A team approach

Of course another possibility, and often a highly attractive one, is any combination of the above. Practitioners, professionals and students alike can each bring something of value to the table. For example, practitioners often have rich local, contextual and experiential knowledge; professionals have expertise and experience; while students are often dedicated, interested and in need of only minimal funding. They key here is to iron out roles and expectations so various agendas can be accommodated with minimal frustration.

One 'team'-based project that comes to mind involved a trial and evaluation of the World Health Organization's *Healthy Workplace Guidelines* in Malaysian industry. Academics from the University of Western Sydney designed the study and advised on data collection and analysis; staff from 3M Australia offered occupational health and safety related training to health and safety officers from the Malaysian Ministry of Health; these Ministry officers offered grounded knowledge, opened industry doors and went on to train industry employees; a University of Western Sydney student recorded the process, collected data, ran the analysis in order to meet university research project requirements; and finally the WHO funded the project.

Working on, for and with others

An additional layer of complexity in researching real-world problems comes from the need to establish a relationship with various stakeholder groups. Researchers need to negotiate whether their research process will see them working 'on', 'for', or 'with' others. While all of these approaches have their place in researching real-world problems, each presents their own opportunities and challenges.

Research 'on' others

Researchers are often seen as scientists whose role is to conduct studies *on* people; to conduct studies that will help illuminate what people do, and why they do it. The goal is the production of knowledge. A prime example of this is the Census where a research study is conducted *on* a particular population, so that the population can be better understood. The researcher tends to take an 'objective' stance and is not heavily intertwined in the life, dilemmas and challenges facing the researched. This approach has a definite place in researching real-world problems and would be highly appropriate when trying to understand something like the extent of a problem.

Research 'for' others

□□□□□□□□□ This can mean two different things. In the first instance research 'for' others can refer to research that is undertaken *for* a client – perhaps a workplace or a government department as a consultancy project. In this case, 'for' simply means commissioned research. Now this may sound straightforward, but research of this type often takes the form of evaluation, and as discussed in Chapter 10, there are plenty of cases where those commissioning such research are really after validation rather than a potentially ugly truth.

The second form of research 'for' others refers to research that is conducted for the 'good' of the researched. This is often seen in development research or within aid agencies whose agenda is to strive towards social transformation of the 'marginalized' (those without a strong power base or voice) through advocacy and action. And while this may sound like (and is) an admirable goal, it does have its own associated challenges. For one, there is a level of debate around the intertwining of research goals and political agendas – the question being how a researcher will negotiate objectivity. Second, is the risk that researchers will impose their political agenda on the 'marginalized'. It is important to consider whether a research agenda 'arises from', is 'assigned to', or 'imposed on' the researched.

Research 'with' others



This refers to collaborative research that is conducted by, for and *with* a range of stakeholders. Generally, this type of research involves addressing stakeholder needs, concerns and problems, and finds the key researcher as but one player in a collaborative

effort to grapple with real-world problems. Now, as discussed in Chapter 9, this is an approach common in action research strategies where the conduct of research is not seen as the domain of the expert. Participation is based on collaboration

between researchers, practitioners and any other interested stakeholders. The distinction between the researcher and the researched is minimized and high value is placed on local knowledge with a goal of working towards empowerment and ownership.

As the icon implies, however, this can be messy. The benefits of conducting research 'with' others can be matched by frustrations related to a lack of control; stakeholders feeling unheard; as well as the difficulties of getting the 'team' working together. The rewards however – meaningful partnerships, sustainable change, ownership and empowerment – can make it well worthwhile.

Researching within your own organization

A final issue quite significant for 'practitioner' researchers (which often includes students with a dual role) is the challenge of negotiating the conduct of research within one's own organization. Now you may think, 'who better to undertake research within an organization than someone with local knowledge, someone who has access, someone who understands the political ins and outs, someone who not only sees problems but tends to be frustrated by them on a day-to day basis, someone that people already know and trust, someone with something to gain for their own professional practice, or something to gain for their own workplace'. And while all of this may be true and together can make an exceedingly compelling argument for practitioner research, as shown in Table 1.1, for each advantage there are disadvantages that practitioners need to carefully consider and thoughtfully negotiate.

PREPARING TO MAKE A START

Okay, in this chapter we've looked at the nature of real-world problems, discussed the role of research in problem solving, and explored some of the potentialities and challenges of conducting this type of research. Hopefully you're sold on the idea and ready to take on the challenge.

The question now is how can you best manage the conduct of research into complex, messy, multi-faceted real-world problems? Well helping you work your way through this, is the task of the following chapters. But in a nutshell, it's all a matter of thoughtful consideration – thinking your way through the process. It's about being well prepared, being ready to think on your feet, knowing how to be strategic and at times even creative. And, of course, being able to check all of this against the criterion of good research.

Just remember there are no easy answers, just you and your ability to manage the research process in a way that best assures credibility. Hard and fast rules don't work. And while this book will guide you through the most effective strategies for dealing with the complexities of researching real-world problems,

TABLE 1.1 OPPORTUNITIES AND DILEMMAS IN PRACTITIONER RESEARCH

The practitioner edge	Opportunities	Dilemmas
Experience	being able to capitalize on a great depth of experiential, local and insider knowledge	 already having the answers – being biased/lacking objectivity
Access	being able to come and go within an organizational setting	 not being seen or respected as a 'researcher'
Trust	 having people be honest and open because they know and trust you 	 being unsure if what is said is to you as a confidential friend or to you as a researcher gathering data losing trust because you are now a 'researcher'
Political nous	 having a good sense of how the organization operates, and how to best manage politics 	getting on the wrong side of the political machine and having to continue to operate within it that political environment after the research is done
Dual role	 being in a position to best see research needs and opportunities 	 role conflict as managerial responsibilities can be at odds with researcher objectivity and/ or confidentiality
Career opportunities	 making a contribution that will enhance your career 	 making a contribution that will undo your career
Improved practice	 evaluating your own practice so that it can be improved. 	 finding out that what you are doing and what you believe in is not working and/or not appreciated
Organizational change	 being able to make a real contribution to shifting workplace practice, systems and/or culture 	 being responsible for an organization needing to go though the upheaval of changing practices, systems and/or culture

keep in mind that the best researchers are ones who have: (1) built solid foundations; (2) are prepared to delve into problems; and (3) are ready make meaning with an aim of making a difference.

Laying foundations

Unfortunately, research is something you can't go off and do without a basic grounding in theory, techniques, skills and strategies. Chapters 2–6 attempt to lay the foundation for these basics, including:

- developing well-articulated, well-constructed, practical research questions (Chapter 2)
- being able to call on and review relevant literature (Chapter 3)
- being able to work through logical and practical methodological design (Chapter 3)
- writing a winning proposal (Chapter 3)
- conducting research in an ethically responsible manner (Chapter 4)
- being familiar with criteria for credibility (Chapter 4)
- being able to draw an appropriate sample/target group(s) (Chapter 5)
- developing proficiency in data collection and analysis (Chapter 6)

Whether your goal is to conduct research into real-world problems as a student, practitioner, or professional, it is proficiency in these skills that will define credible and rigorous research capable of making a difference.

Delving into problems

Once you have a solid foundation and are familiar with research basics, it's time to match your new knowledge and skills against various research objectives. When researching real-world problems, such objectives will generally involve:

- gaining a better handle on problem situations (Chapter 7)
- trying to find a solution or solutions to a particular problem (Chapter 8)
- engaging in action-based situation improvement through research (Chapter 9)
- evaluating change initiatives (Chapter 10)
- more than one element of the above

What is important to remember is that it is your aims/objectives and your research question that will define your methodological approaches. You have to know what you want to know and what you want to accomplish before you take on the task of developing a research plan.

Making meaning/making a difference

Finally, the conduct of research into real-world problems is meaningless if nothing comes from your research. You need to be able to move your study from raw data to an end product capable of making an impact. This will involve:

- engaging in meaningful analysis (Chapter 11)
- drawing relevant and compelling conclusions (Chapter 11)
- crafting a credible and engaging storyline (Chapter 12)
- writing up useful 'deliverables' (Chapter 12), and finally
- making sure your research is disseminated and utilized (Chapter 12)

Researching real-world problems is about conducting research that has the potential to make a difference ... to both yourself and to others. I hope you will take up the challenge – and please remember to enjoy the journey!

Chapter Summary

- We may live in a world riddled with problems, but we also live in a world full of problem solvers, in a world dedicated to learning, changing, improving and evolving.
- Research can be the key to informed decision-making related to problem solving. It can be instrumental in gathering data related to: understanding problems; finding solutions; implementing change; and evaluating success.
- Researching real-world problems is about research that is local, grounded, practical and responsive to everyday needs. Local or national government, non-government organizations, aid agencies, communities, corporations and workplaces in general can all benefit from problem-based research.
- Research into real-world problems can open up possibilities for change at the level of: professional development; practice; programmes; policy; and organizational culture.
- Real-world problems, and the contexts in which they sit, tend to be messy, complex, and multi-faceted – posing a number of challenges to the reflective researcher.
- Researchers of real-world problems need to consider: the challenge of conducting research in the field; how to define a research team; whether they are working on, for, or with others; as well as the challenges they will face if conducting research in their own organization.
- As well as an ability to think strategically, preparing to research real-world
 problems requires: solid foundations; being prepared to delve into problem
 situations; and being prepared to do what it takes to make a real difference.