





Learning Approaches in Water Operators' Partnerships

Framing the Issues





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ABBREVIATIONS

BCC Bulawayo City Council

BEWOP Boosting Effectiveness in Water Operators' Partnerships

BOWSER Bulawayo Water and Sanitation Emergency Response

BWS Belize Water Services

CCWD Contra Costa Water District

GWOPA Global Water Operators' Partnerships Alliance

IWA International Water Association

IWC International Water Centre

M&E Monitoring and evaluation

MDG Millennium Development Goal

MWAUWASA Mwanza Urban Water and Sewerage Authority

NGOs Non-government organisations

NOSS National Occupational Skills Standard

NRW Non revenue water

PBA Perbadanan Bekalan Air

PWSA Penang Water Services Academy

SNDE Société Nationale d'Eau

UNESCO-IHE UNESCO Institute for Water Education

VEI Vitens-Evides International

WOPs Water Operators' Partnerships

WVZ World Visions Zimbabwe

WWN World Waternet

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LEARNING APPROACHES IN WATER OPERATORS' PARTNERSHIPS

EXECUTIVE SUMMARY

This paper has been produced as a framing paper for the "Learning Approaches" thematic session at the second Global WOPs Congress, held in Barcelona in November, 2013. The aim of the paper was to provide the conceptual basis for understanding capacity development and learning approaches in Water Operators' Partnerships (WOPs).

The paper also makes an important initial contribution to the Boosting Effectiveness of Water Operators' Partnerships (BEWOP) project, a 5-year collaboration between UN-Habitat's Global Water Operators' Partnerships Alliance (GWOPA) and the UNESCO Institute for Water Education (UNESCO-IHE) to mainstream effective knowledge transfer and change in WOPs. This work contributes specifically to Activity 2 which focuses on how knowledge is transferred between utilities and managed within them.

Globally, many water operators are not yet able to fulfil their mandate to provide effective, affordable and sustainable water services for their consumer communities. The operators' capacity needs vary considerably, dictated by the unique circumstances and challenges of each. WOPs are a peer-to-peer, non-profit mechanism for helping water operators to learn from each other in order to increase their capacity. Arrangements for WOPs vary considerably in terms of their focus and duration, and some have many partners involved. However, at the heart of each there is a mentee partner with an identified capacity need, and a mentoring partner willing and able to help.

Capacity development theory and practice are evolving disciplines with many dimensions. Current understanding is that within any given system capacity exists in and between multiple levels – individual, organisational, and enabling environment, and that intangible capacity is equally, if not more, important as tangible capacity. Themes for application will be defined by the context. The need for learning at all levels is an inherent feature of capacity development, both in the form of knowledge and skills transfer, and in the acquisition of other capacities such as the ability to solve problems and to innovate. The need is for both first and second loop learning i.e. knowing how to do things right and to do the right things. The most effective approach to capacity development is not events, but facilitated and supported processes that draw together multiple linked and sequential methods over time. Of particular relevance to WOPs is the fact that partnerships are now recognised as effective mechanisms for learning.

The design of any capacity development intervention will be most appropriate and effective if it is based on a substantive assessment of current capacity and conditions, drawing on the knowledge and understanding not only managers but also operators. Design is then a series of decisions to define the capacity goals and objectives to be achieved, decide who needs to be involved, and how best to achieve the desired results, using methods that can maximise opportunities and minimise or overcome constraints. Training has a role to play in developing the technical capacity of individuals, but often training fails to achieve hoped-for results because the learning acquired on courses is only partly applied. Other types of learning approach have proved to be more appropriate and effective for facilitating the development of intangible and organisational level capacities. However, it is recognised that both training and learning practices have limited effectiveness for capacity development in complex situations.

The common feature of WOPs is that they focus on aspects of service delivery, either to solve a problem (including staff knowledge and expertise) or to introduce a new feature of the system to enhance the quality or range of services provided. While there have been and continue to be many WOPs, few have been written up in sufficient detail for others to understand fully the capacity development process and results. All cases involve an element of capacity development, though how it is defined in the partnership agreements varies significantly from one to another. What case studies and other documentation have identified as being the most important conditions that support success in WOPs are: enabling conditions for the WOP to function; the right starting point; a strong planning framework; the overall WOP process creates conditions conducive to learning; and, quality of the relationships within the partnership. However, no WOP will be without its challenges and the

evidence cases indicates that the main challenges are: insufficient diagnostics and unhelpful assumptions; language and cross-cultural working; and, lack of guidelines for those new to WOPs.

There are a number of important gaps in the available information, most significantly: how best practices are identified and transferred; monitoring and evaluation (M&E) processes for capacity development; understanding the motivations for learning to lead to change; and understanding capacity development at the enabling environment level.

This paper has sought to draw together what is currently thought to be the most effective approach to capacity development with what is known of the current practice in WOPs. Upon this basis the paper proposes an initial framework for assessment of capacity needs and design of WOP capacity development activities. Any such framework must start with a definition of capacity that clarifies 'Capacity for what?' together with a definition for the process of capacity development. In the context of WOPs the following definitions apply:

For water and sanitation operators, capacity can be defined as the ability to sustainably deliver quality services to all within their target communities.

Capacity development is understood as the process facilitated by WOPs whereby water operators unleash, strengthen, create, adapt and maintain their capacity.

Other elements of the framework are consideration of tangible and intangible capacities across all levels in the context of the important themes for water operators' capacity, namely: technical; managerial; governance; and, consumer relations. It further addresses the need to think about both first and second loop learning, both for the mentee and the mentor partner.

While many will be able to use the information directly in design or refinement of their WOPs, it is the intention of the BEWOP project to build on this framework, and adapt it so that it may be considered a practical tool for WOPs implementers and supporters.

As noted in the paper, there are some important gaps in the available evidence about what is currently happening in WOPs. In order to extend the level of current understanding and to offer something that can help improve the design and delivery of WOPs, the conclusions lead to the following recommendations:

- Undertake research that will provide better understanding of learning approaches as they are currently used in WOPs, and the factors that support or block successful application of learning;
- Seek ways to fill the gaps in current knowledge about other aspects of capacity development in WOPs;
- Develop a format and guidance for framing capacity goals, and learning objectives and indicators in WOP agreements;
- Develop a format and guidance for including M&E of capacity development approaches in the overall WOP M&E framework; and,
- Explore how best to develop the framework above as a helpful tool for those negotiating new WOPs. This might be the creation of a checklist or assessment guidelines, which could then be piloted.

1. INTRODUCTION

1.1 AIM OF THE PAPER

The aim of this paper is to provide an initial theoretical foundation for understanding capacity development and learning approaches in Water Operators' Partnerships (WOPs). It presents an overview of current practice in capacity development generally and within WOPs, from which it identifies ideas and approaches worthy of special attention. The paper suggests an initial framework to guide future initiatives, and possible actions at different levels for encouraging best practice. The paper also highlights some current gaps in knowledge and understanding about capacity development in WOPs that need further investigation.

The paper is a contribution to the start of the Boosting Effectiveness in Water Operators' Partnerships (BEWOP) project. This project is a collaboration between UN-Habitat's Global Water Operators' Partnerships Alliance (GWOPA) and the UNESCO Institute for Water Education (UNESCO-IHE) to mainstream effective knowledge transfer and change in WOPs. An earlier draft of the paper was prepared as background to the "Learning Approaches" thematic session during the 2nd Global WOPs Congress held in Barcelona from November 27–29th, 2013.

1.2 THE CURRENT STATUS OF WOPS: RANGE AND PURPOSE

Globally, many water operators experience a wide array of service delivery problems associated with lack of capacity and weak governance. These problems include: poor management; weak operational and financial management; under-skilled and under-valued personnel; lack of effective policies; absent or weak service orientation; political interference; and, little or ineffective regulation. For many years it was hoped that the private sector could solve performance shortcomings. However private sector entities would rarely venture into the high risk and low-profit water market, or where they did, often failed to provide the expected solutions and results. With an increasing number of contracts terminated or coming to an end, the private sector has been departing, taking much institutional knowledge with them, and leaving many operators in an even weaker position to perform well. The imperative of trying to reach the water-related Millennium Development Goals (MDGs) called for a different strategy. WOPs, already being conducted in a piecemeal fashion by operators around the world, were recognized as a potential solution. A Global Mechanism to scale up WOPs was called for by the UN Secretary General's Advisory Board in its 2006 Hashimoto Action Plan, and UN-Habitat was requested to establish GWOPA to support WOPs as an alternative approach to enabling water operators to achieve sustainable capacity.

GWOPA defines WOPs as:

... peer support exchanges between two or more water operators, carried out on a not-for-profit basis, with the objective of strengthening their capacity, enhancing their performance and enabling them to provide a better service to more people.\(^1\)

Within this definition it is acknowledged that knowledge sharing and professional support can take a multitude of forms depending on the individual circumstances and needs of each WOP. GWOPA has identified some of the **ideal** key features of WOPs as:

- They are demand driven, in that neither the mentoring partner nor the donor defines or drives the agenda or process, but are defined by the mentee partner;
- They are based on mutual trust, and the good governance principles of integrity, transparency and accountability; and

¹ GWOPA Strategy 2013–2017 available at http://gwopa.org/index.php/resource-library/3536-gwopa-strategy-2013-2017 accessed 4.9.2013

• The agreements to establish them are results-oriented.

A number of additional advantages of WOPs have been noted, including that they are relatively cost-effective; tend to be flexible enough to respond to evolving needs; enable the involvement of a diversity of essential actors; and that they help put the local operator in the drivers' seat to sustain improvements over the long-term.

A more strategic advantage of WOPs is that over time they can have a significant multiplier effect. As water operators gain capacity having themselves been supported by a mentoring partnership, they are then able to mentor others. Some examples where this has happened are discussed below.

Whatever their duration and nature, all WOPs have a start-up phase, either formal or informal, in which preliminary assessments are conducted and agreements are prepared. Thereafter, the nature of a WOP can vary significantly both in terms of duration, focus of work, and the number and nature of partners involved. No two are exactly the same. Some are very simple, focused on a single technical issue and last less than a year. Others are multi-faceted, covering several areas of need and lasting for three or more years. The third group can be defined as special performance partnerships with a mandate to work on many different aspects of service delivery and organisational functioning. These will likely be long-term, involving multiple actors. The Bulawayo case study outlined in Box 6 below is an example of this type of WOP.

It isn't possible to know how many WOPs are in operation worldwide at any give time, although GWOPA's database contains over 100 records. Globally the span is a varied and dynamic group with start-ups, implementation, extensions and completions underway all the time. The GWOPA Secretariat helps broker WOPs. Other WOPs are established through bilateral arrangements. For example, well-established mentoring partners such as Vitens-Evides International (VEI) and Dunea in the Netherlands will often work through their own networks to extend the range of their partnerships. However, most WOPs come into being through the WOPs platforms that operate in the regions. GWOPA and its members, particularly development banks and water associations, have set these up in Asia, Africa, the Arab Region, Europe, Latin America and the Caribbean, North America and Oceania. Additionally, some water associations are now starting to facilitate in-country WOPs. An example of this is the Indonesian Water Supply Association (PERPAMSI), which three years ago began to facilitate WOPs among its own members, some of whom had previously been mentees in WOPs with an external partner. There are also known national level platforms in Mexico, Columbia, Brazil and Pakistan.

Support for WOPs is given by a number of funding partners such as bilateral and multilateral donors, development agencies and regional development banks. Additionally in some countries, such as the Netherlands and France, water operators are permitted by law to spend a proportion of their revenue on activities in developing countries. Many small-scale WOPs are self-funded by the partner operators.

Creating the enabling environment and incentives for WOPs calls for a broad range of stakeholders beyond those directly involved in the partnerships. The role of central and local governments in creating the legal and policy frameworks for change cannot be underestimated. Similarly, in many situations civil society organisations have an important role to play, which can range from community representation, through a range of capacity development activities, to the consumers, who need to be engaged in multiple ways to ensure that any capacity developed in water utilities is fully and appropriately used in the communities that they serve.

1.3 THE IMPORTANCE OF CAPACITY DEVELOPMENT AND LEARNING IN WOPS

The aim of all WOPs is to help water operators acquire the capacity they need to improve the delivery of water services. GWOPA, working in the spirit of the 'Hashimoto Action Plan', has as one of the guiding principles in its Charter 'Learning from the Past and Others: The Global WOPs Alliance seeks to draw lessons and learn from past experiences to promote best practices for utility partnerships and capacity building.' This recognises the importance of holding learning central to the work of all WOPs, and this paper is a step towards making that principle an operational reality.

The capacity that water operators need may be defined in different ways according to the nature of each operator's particular circumstances and challenges. Learning is an inherent feature of capacity development, both in the form of knowledge and skills transfer, and in the acquisition of other capacities such as the ability to solve problems and to innovate. Thus learning may be considered a central supporting strategy for achievement of the aim of WOPs, because it is a mechanism to facilitate necessary capacity changes coming into place. However, most often in WOP arrangements capacity development is framed in terms of, first, the problems to be solved and, second, the activities undertaken to solve the problems. Rarely are learning approaches (or any capacity development methods other than training) mentioned specifically in planning and contracting. Some documentation identifies lessons learned from different projects and activities, but to date that appears to be the extent to which learning has been addressed in WOP methodologies.

"Most often in WOP arrangements capacity development is framed in terms of, first, the problems to be solved and, second, the activities undertaken to solve the problems. Rarely are learning approaches, or any capacity development methods other than training, mentioned"

Examination of case studies and other WOPs documentation shows that capacity development is implicit in virtually all aspects of WOPs operations, and within this learning must be happening even though it is not specifically discussed. Given this centrality of capacity development to the implementation and success of WOPs there is a need to examine and make explicit the learning and knowledge transfer methods already in use, and explore options for enhancing current practice for greater effectiveness in future. Guiding this aspect of WOPs' through the use of a framework could contribute to improved practice by making the planning, monitoring and evaluation (M&E) of capacity development activities more focused and specific. Additionally, those tasked with knowledge and skills transfer would have more resources to support their work, and help them to deepen their expertise in developing the capacity of their counterparts.

As will be described in other sections the need for learning goes beyond technical personnel and their managers, to the organisational level of the utilities, and beyond that again to the various agencies in the operating environment that are influential in determining the enabling conditions for change to happen. A further dimension of learning involves the consumers, who often need to be made aware of, or educated about, various aspects of water service operations and how to use them. Last, but not least, the mentoring partners can also benefit from working more consciously with a learning framework, as it will help to prepare their experts for assignments, and consolidate their experiences into a body of knowledge within their own organisations.

2. CURRENT THEORY AND PRACTICE IN CAPACITY DEVELOPMENT

2.1 OVERVIEW OF CURRENT THINKING ABOUT CAPACITY DEVELOPMENT: THEORY³

In its broadest sense capacity development is about change and transformation through designing and facilitating culturally appropriate local solutions to development issues at a large enough scale to make a real difference for human development. Ideally every capacity development process is endogenous, led by local actors, who may or may not be supported by a range of external partners. Capacity development is both a complex process and inherently political because it is inextricably linked to change. Ownership is therefore a prerequisite for sustainability, as is having clarity about whose capacities are to be developed and for what purpose. Learning is emerging continually about what works and why, which means that the understanding and the practice of capacity development are ongoing and dynamic processes. For example, in some frameworks that have been developed to guide approaches and implementation attention is now being paid not only to capacity development, but also to utilisation and retention of capacity once in place.

Attention is now being paid not only to capacity development, but also to utilisation and retention of capacity once in place.

2.1.1 LEVELS AND TYPES OF CAPACITY

One key feature of capacity development that is now clearly understood is that capacity exists and is needed at multiple, inter-related levels. In practice this means that capacity development initiatives can only achieve sustainable results if they take account of all related levels, the linkages between levels, and the complexity of the whole system. One of the most frequently used specifications of levels is 'Individual – Organisational – Institutional'. However there are many variations of this, both in terms of what the levels are called, and how many there are. Many organisations include the sectoral level in their specifications, often with reference to the 'water sector', because for any country there are multiple stakeholders concerned with water. The diagram below illustrates what the levels look like in the context of a water sector.

³ This section adapted from the Core Concept section of the Learning Package on Capacity Development available at www.lencd.org/learning accessed 25.10.2013

DIAGRAM 1: LEVELS OF CAPACITY



The second area of importance is that there are different types of capacity. The tendency in the past has been to think that capacity is the technical skills of individuals. While this is still important, because all organisations, including water utilities, need competent technical staff in a range of disciplines, the reality is that a comprehensive analysis of capacity embraces a range of different types. The mix is of both tangible and intangible features, which are also sometimes called 'hard and soft' 'technical/ functional and social/ relational', or 'visible and invisible'. As shown in Table 1 below, types of capacity may be distinguished under these different headings. However, it is important to note that the distinctions between some of these capacities are not always as clear-cut as suggested in the table, they are presented in this way simply to highlight the different classifications. There is now a growing recognition that, in many situations, intangible capacities are the essential underpinning requisites for other types of capacity to exist or be utilised.

Support for capacity development needs to be approached in a range of ways to address the different needs.

The different types of capacity are relevant at all levels in any given system, up to and including the enabling environment. According to the context, different combinations and measures of capacities may be needed. A holistic analysis will show that overall capacity is a mix of tangible and intangible components that fit to the context and enable individuals, organisations, sectors and broader social systems to carry out their functions and achieve their development objectives. Support for capacity development therefore needs to be approached in a range of ways to address the different needs.

TABLE 1: TYPES OF CAPACITY

Tangible	Intangible
Capacities that may also be described as hard, technical, functional, and visible	Capacities that may also be described as soft, social, relational, and invisible
 Technical skills, explicit knowledge and methodologies (which for individuals can be considered as competencies) Organisational capacity to function: appropriate structures; systems and procedures for management, planning, finance, human resources, monitoring and evaluation, and project cycle management; the ability to mobilise resources Laws, policies, systems and strategies (enabling conditions) 	 Operational capacities such as: Organisational culture and values Leadership, political relationships and functioning Implicit knowledge and experience Relational skills: negotiation, teamwork, conflict resolution, facilitation, etc. Problem solving skills Communication (including intercultural when relevant) Adaptive capacities such as: Ability and willingness to self-reflect and learn from
Note: tangible resources like infrastructure, money, buildings,	experienceAbility to analyse and adaptChange readiness and change management
equipment and documentation can be considered as the material expression or product of capacity, but they are not capacity in and of themselves.	Confidence, empowerment and or participation for legitimacy to act

2.1.2 LEARNING⁴

Learning, knowledge transfer, skills transfer and capacity development are inextricably linked, in that learning, knowledge and skills transfer are all means through which capacity may be developed, and knowledge and skills transfer are means by which learning may happen. For the purpose of this paper the use of the word learning embraces knowledge and skills transfer at the individual and the organizational levels, as well of routes to acquisition of intangible capacity and other approaches in the enabling environment.

The improvement of water services requires different levels of learning, which can be acquired in different ways. Most simply put learning may be needed for two purposes, either to understand something new or for the correction of an error. For an individual or an organisation, learning about something new may involve either learning the rules that already exist, or how to create new rules to meet the needs. Likewise at both levels, when something goes wrong the first response is usually to see what is not working within a known set of rules and variables, and then to introduce corrective steps.

Among many different approaches to organisational learning, the theory of single and double loop learning, developed by Argyris and Schon⁵, provides a helpful framework for thinking about water operators' learning needs. The first level of learning is about operational matters and how to do them, or how to do them better. This level is about learning and then applying known rules for the way to do things. This could be, for example, about the installation of meters, or how to stop leaks. These are primarily operational matters that call for the skill to implement technical methods routinely and consistently to known standards. It is important that

⁴ This section draws on http://infed.org/mobi/chris-argyris-theories-of-action-double-loop-learning-and-organizational-learning/ accessed 15.10.2013

⁵ There are many different resources available on the Internet to explain this theory. For example, http://infed.org/mobi/chris-argyris-theories-of-action-double-loop-learning-and-organizational-learning/ accessed 27.10.2013

these methods are implemented properly so that the system works efficiently and effectively. In terms of learning this can be called 'single loop learning', sometimes referred to as 'doing things right'.

But learning at this level is not sufficient on its own. Complex systems such as water services also require another level of learning. For example, it would not be possible to reduce the percentage of non-revenue water (NRW) through the application of single loop learning alone. Dealing with a challenge of this nature requires a combination of both technical knowhow and intangible capacities such as analytical and problem solving abilities, and maybe negotiating skills. For this level of learning, rather than applying rules, it is necessary to ask and answer the questions that will establish the rules. Some of the basic questions to be dealt with are "What is causing this problem?", "Who is involved and what is their role?", "What factors will help or hinder resolution?", "What are the options for change?", "Which is the best option?" and "How can we most effectively apply the solution?" This level of learning is called 'second loop learning', or 'doing the right things'. Every organisation needs the capacity for second loop learning for continuous improvement, because learning at this level is essential for flexibility and adaptation in response to opportunities, challenges and external change. Without second loop learning no organisation can hope to be sustainable. Where the result of first loop learning is doing things better, the result of second loop learning is doing things differently by changing the governing rules for any particular function.

BOX 1: SOME LEARNING THEORIES THAT CAN APPLY TO WOPS ACTIVITIES

Many different theories attempt to explain how people learn through the definition of learning styles. They all have their merits and disadvantages, which must be judged according to the group of learners under consideration. The two theories offered here are perhaps among the most applicable for water operator staff.

Honey and Mumford's learning styles

This is probably the best known of the learning styles theories, and it is useful because it provides a framework for understanding the different ways in which individuals learn and acquire skills. This in turn makes it helpful for the design of learning processes, because it shows that in order to facilitate a group of learners the process must be multi-dimensional so that it is sensitive to their different learning styles. It is particularly useful when working to develop technical capacity, which is often a central feature of WOPs. According to this theory there are four different learning styles, each of which are a part of an experiential learning cycle. Each individual will favour one of the styles, though not exclusively.

The four styles are:

- Activist (feeling): those who learn by doing, having an experience
- Theorist (thinking): those who like to know the theory behind the action
- Pragmatist (doing): those who need to be able to see how to put the learning into practice through active experimentation
- Reflector (watching): those who prefer to observe and reflect on what they have seen

Each of these styles requires different types of activity to facilitate learning.

70 20 10

This model is included here because it helps to explain the success of the mentoring approach that is central to the design of many WOPs. The 70 20 10 model has evolved from extensive research about what actually happens in the workplace, namely that the majority of learning comes from experience, backed up by social exchanges. It is gaining popularity as an approach to management and leadership development. In this theory it is understood that:

- 70% of learning is gained from actually doing the work, dealing with challenging tasks, solving problems, etc.;
- 20% of learning comes from others mentors, colleagues, networks and so on; and
- 10% comes from formal training events.

Using the broad outline of this model can be useful for guiding the proportions of formal training and follow up support to offer in WOPs.

Application of this model for WOPs is discussed in Exploring water leadership Lincklaen Arriëns & Wehn de Montalvo, 2013

2.1.3 THE CULTURAL CONTEXT OF LEARNING

When working across cultures, it is essential to appreciate that learning is not understood or acquired in the same ways in all societies. Examples of how these differences may show up are:

- People educated in a student-centred pedagogy will take a more active role in their learning than will
 those educated in a teacher-centred pedagogy who will, most likely, hold the teacher responsible for
 their learning;
- For some, questions are an essential learning mechanism, while others expect to be told, not asked, and will find questions inappropriately intrusive or extractive; and,
- For some, refection on personal actions and experience is an invaluable source of learning, while for others there is no value in self, only in what is handed down from respected elders or teachers of higher status in society.

Before embarking on any activity designed to facilitate learning from one culture to another it is important to seek the answers to questions such as the following:

- How is learning defined in this culture? As a study process, as wisdom, or as the means to do something?
- What sources of learning are valued? Books, elders, or personal experience?
- What types of learning are valued within this culture? Learning to do, to be or to relate?
- How do people expect to learn? By doing, observing, reading, or listening?
- Who is thought to be responsible for the student's learning? The teacher or the student?

Other questions may also be appropriate according to the particular culture.

Given that learning is inherently about change in order to do things differently or better, it is equally important to understand any cultural blocks to learning, as these may be very powerful inhibitors of change. For example, learning from mistakes can be a very useful approach, however in some societies the admission of a mistake will create loss of face and is therefore to be avoided at all costs. In post-conflict societies people who have experienced trauma may have become risk averse to the point of being frozen and unable to do anything to change the status quo. In some circumstances people are fearful of doing anything differently unless given direct and specific instructions to do so from higher authorities. The questions to be considered are:

- In this context what are the blocks that prevent learning from leading to change?
- How can people unlearn fears and inhibitions in order to be open to something new?
- What approaches might be helpful in overcoming the blocks?

The dangers of planning and implementing learning activities without considering these questions are that, firstly, the activities will have limited impact and, secondly, resources and opportunities will be wasted. It is therefore worth investing time to explore cultural perspectives on learning before beginning to plan.

2.1.4 LEARNING IN PARTNERSHIPS

Within capacity development practice partnerships are now being recognised as important and effective mechanisms for learning. There is a body of academic work about how learning can best happen within a partnership, and what conditions will support it, although this body of knowledge is not yet well incorporated into the general capacity development discourse. There are also many interpretations of the word partnership, because it is applied to many different types of relationship. The paper *Partnerships in the*

Water and Sanitation Sectors noted that the factors that help partnerships to flourish are: common objective and ownership; communication; transparency; fairness; enabling environment; and, trust and respect. It can be argued that these factors are also all necessary for learning to take place. In WOPs a partnership comes together around the core factor of a difference in capacity. Other differences or imbalances, such as levels of engagement and commitment to name just two, may have the potential to impact on the opportunities for learning.

Despite the scarcity of documentation there are some important lessons that have been learned in the NGO sector⁷, primarily in the context of learning in North-South partnerships. These lessons are summarised here, because they are also relevant to WOPs.

Lessons on Partnership that are applicable to WOPs

Explicitly negotiate and clarify the purposes and principles of partnerships, including related expectations, rights and responsibilities: learning cannot happen if the nature or purpose of the partnership itself is unclear;

Build on existing opportunities and create space for learning: remember that learning is always happening to some extent, and use it as a starting point. Also consider how to maximise opportunities and space for change;

Design projects that explicitly facilitate learning: distinguish the different types of learning that need to happen and formulate learning objectives for each;

Build trust and consider the longer term: it is better to consider learning in terms of a process, rather than as an event. If time is taken to build good relationships, everyone is likely to be more open and trusting therefore better able to deal honestly with mistakes.

Fund learning as a core activity: working with a broad array of learning methods and opportunities, such as exposure visits, needs dedicated funding;

Develop appropriate systems of evaluation, measurement and accountability that make learning a key focus of evaluation: planning needs to formulate learning goals and indicators that can then be incorporated within broader M&E frameworks;

Address internal factors of organisational culture and question deeply held assumptions: organisational culture may not welcome or support innovation and change, and this would be a significant barrier to learning. The culture therefore needs to be examined and understood, and where necessary, challenged;

Address power-related issues and other barriers to learning: this includes being aware of gender imbalance and any factors relevant to marginalised groups; and,

Look beyond partnerships to networks and communities of practice: often it is necessary to think beyond a two-way partnership to one that involves more members, in order to connect with other sources of learning.

⁶ Susan Graas, Annette Bos, and Caroline Figuéres (UNESCO-IHE) and Tunde Adegoke (WESWA) 'Partnerships in the Water and Sanitation Sector' IRC International Water and Sanitation Centre Thematic Overview Paper 18, available at http://www.irc.nl/page/33041 accessed 29.8.2013

⁷ This list adapted from Vincent, Robin and Byrne, Ailish (2006) 'Enhancing learning in development partnerships', Development in Practice, 16:5, 385 – 399, available at http://dx.doi.org/10.1080/09614520600792192 accessed 22.10.2013

2.2 OVERVIEW OF CURRENT THINKING ABOUT CAPACITY DEVELOPMENT: GUIDANCE FOR PRACTICE

Capacity development practice is an evolving discipline that has many dimensions. The most effective practice is based not on events, but on process approaches that are linked and sequential, working over time to move forward step-by-step, building on what already exists or is coming into place. The design of good capacity development processes depends on many factors, which should start with thorough assessment. Thereafter, the various components of the process will be drawn together according to need, decisions about entry points, availability of appropriate resources, and so on. It is also now understood that training is most effective, not if offered as a stand-alone event, but if situated appropriately within a process to facilitate the application of learning in the workplace. The sections below discuss these points in more detail.

2.2.1 THE IMPORTANCE OF ASSESSMENT8

The design of the capacity development intervention will be most appropriate and effective if it is based on a substantive assessment of current capacity and conditions. As noted in Section 3.4 below one of most common challenges to the effectiveness and success of WOPs is 'insufficient diagnostics', accompanied by unhelpful assumptions. Assessments are necessary to understand the potential and limits of any type of capacity development intervention, and in particular to recognise any barriers to the transfer of learning leading to change in practice.

When the focus of the capacity development initiative is the technical skills of utility staff it is essential to assess both how the staff themselves understand their technical needs and the availability of the resources needed for implementation. The other critical factor is management's attitude and ability to support staff to implement changes. Without the full support of the organisation the resources spent, the time allocated, and the efforts dedicated in any type of capacity development initiative, including training, may not result in the desired effect. Assessment of environmental factors, especially power dynamics and resource availability, will provide invaluable guidance about these and other issues such as the most effective entry points, and the most appropriate means of intervention.

There is a growing understanding that specific areas of capacity need to be assessed within the context of larger system capacity. For example, consideration of individuals should be in terms of what their enhanced capacity would contribute to higher-level capacity goals for the whole utility. Similarly, assessment of a team must take into account the functioning of the whole department in which it is situated. The various factors that should ideally be taken into account when doing assessments are noted in Box 2 below.

⁸ This section draws on two key documents: **Training for Better Cities** (2012) UN-Habitat, accessed 7.11.2013, and 'Leadership in knowledge and capacity development in the water sector: a status review' Uta Wehn de Montalvo and Guy Alaerts Water Policy 15 (2013) 1–14 available at http://www.iwaponline.com/wp/01552/52/ accessed 7.11.2013

⁹ As noted elsewhere there is no publicly available documentation that deals with mistakes in WOPs. However, a number of the respondents interviewed noted that mistakes have been made because of insufficient depth and analysis in the assessment phase.

BOX 2: GOOD PRACTICE FOR CAPACITY ASSESSMENTS

Best practice assessments incorporate the following features, all of which are interlinked in several ways

Looking at multiple levels and variables: Much helpful analysis can be gained from looking at integration across all levels and the variables that exist at each, such as: individuals' motivation and attitudes; organisational change processes, management commitment, incentive structures, and so on; and, the enabling environment, for example national level laws and policies, and public sector investment plans.

Start with existing capacity: identification of existing capacity is a helpful and affirming starting point for understanding what individuals, teams, utilities or any other relevant stakeholders such as the consumer community need to move forward. The choice of tools is important in this respect. Using a 'gap analysis' as the primary assessment tool does not pay sufficient attention to the capacity that already exists, or to other important factors like key change agents and previous or current processes on which a new intervention should build. This can be demotivating for staff, who may already feel undervalued, to be told only what they don't know. Additionally, in the gap analysis approach the definition of required capacity may be too ambitious, based on high international standards, rather than achievable next steps relevant to the local context. (This isn't to say high international standards should be ignored, but in many circumstances they can only be achieved in the long term, through a series of sequenced interventions.)

An element of self-assessment: however technical the capacity need may be, a fully informed and accurate assessment will best be achieved with the full involvement of local stakeholders, because they have the most knowledge about the specific areas of need under consideration. In any type of assessment process, there can be a tendency to focus only on the views of managers whereas the personnel doing the work hold the all-important knowledge of what is actually happening in daily operations. Their views are important not only for first loop learning, but also because they often also have much to offer in terms of second loop learning. Another issue that sometimes needs consideration is that of political influence, which might be difficult for the mentee utility to deal with. The role of external expert is, therefore, to facilitate internal processes that gather information from all relevant sources, and to provide the technical knowledge component of assessment as required.

Assess absorptive capacity: Assessment of existing capacity needs to take account of the absorptive capacity of the individuals, utility or group under consideration. There is no point in implementing a capacity development initiative if the people and or utility concerned are not yet ready to absorb and use what is on offer. It may be, for example, that individual technicians are ready for skills enhancement, but the utility does not yet have the resources or systems in place that would allow them to utilise those skills. (See Box 3 below for an example of working on this issue.)

Local culture and context: Analysing culture and context, within the utility, sector, enabling environment and local communities, can help to ensure that enabling and constraining factors are taken into account and understood. In particular this means paying attention to cross cutting issues such as gender, power dynamics and the physical environment. Analysis of local factors is particularly relevant in the water sector, where much may depend on the understanding and engagement of both local authorities and the consumer community.

Purposeful analysis: Assessments will be more helpful in informing the design of effective capacity development processes if they have clear purpose to guide evaluation and analysis of the data, including the cross cutting issues such as gender factors, in ways that will inform the design of an effective capacity development process.

2.2.2 HOLISTIC AND SEQUENCED PROCESSES¹⁰

Design of a capacity development initiative is a series of decisions about what needs to be achieved, who needs to be involved, and how to achieve the desired results. The quality of the decisions will be related directly to the quality of information available from the assessment process, including understanding of the local culture and context. These factors can range from practical matters such as the availability of resources and other support mechanisms, to important cross cutting issues such as gender, power relations and the political economy for change. It is extremely unlikely that any analysis would show that circumstances in a utility are all helpful opportunities with no constraints. The task of decision makers and designers is, therefore, to assess, in conjunction with key local actors, in particular the operational staff who will make things happen, if there is a way forward that can maximise opportunities and minimise or overcome constraints.

¹⁰ This section adapted from Pearson, J. (2011), 'Training and Beyond: Seeking Better Practices for Capacity Development', OECD Development Co-operation Working Papers, No. 1, OECD Publishing, available at http://www.oecd-ilibrary.org/development/training-and-beyond-seeking-better-practices-for-capacity-development_5kgf1nsnj8tf-en;jsessionid=4ld21rkgpd5gq.delta accessed 28.10.2013

As in any systematic planning process intended to achieve results an essential first step is the specification of overall goal/s for the capacity development agenda. Especially when aiming for long-term changes, good design includes an appropriate mix of both long – and short-term perspectives. For example, when working to develop long-term community engagement in sustainable water solutions, the planning framework would ideally include short and mid-term results, such as having a short-term objective to identify and set up communication mechanisms with relevant community groups. Planning needs to take account of the fact that not everything can be done at once and so activities need to be sequenced. Some steps and activities have to be completed to put in place foundational conditions before further initiatives can be started.

It is, therefore, important to distinguish the difference between long-term learning goals and component parts that can be achieved more quickly as specific objectives. Doing something to achieve some 'quick wins' can be very helpful in terms of securing engagement and motivating people for the longer-term process. This is very true for water operators where staff may be able quickly to acquire the knowledge and technical skills needed as a component of a broader capacity development goal. For example it may be possible to train chemists in a short time frame as one of the first activities to achieve a longer-term goal about reaching consistent standards of water quality. Quick wins are a good way of engaging and motivating staff who may otherwise feel reluctant to engage with a complex change process if they feel it is being imposed on them. Staff being willing and motivated to embrace a change process is an intangible capacity that all utilities need. A danger of not having any learning goals and objectives is that the failure to specify desired results at the start, whatever the approach and formulation, makes it impossible to monitor the effectiveness of the learning practices and measure the contribution they are making to overall capacity development.

It would be very unusual for any capacity need to be answered by one learning practice alone. However, it is all too frequently assumed that activities targeting individuals will automatically contribute to higher-level needs, which is by no means the case. This approach to capacity development is very deeply ingrained in some institutional cultures. Changing approaches to be more holistic, iterative, and therefore more effective, means that those who assume that every problem can be solved by training will need to let go of that assumption – the 'I have a hammer, so every problem is a nail' syndrome. Designing an appropriate mix of modalities over time depends on the designers' understanding of how to match learning methods to specific needs.

BOX 3: ENABLING CONDITIONS AND ABSORPTIVE CAPACITY

World Waternet (WWN) in Amsterdam has long recognised that no WOP will be successful in bringing sustainable change unless certain conditions are in place at the start. For WWN, the most important are legislation and the political will to support change. WWN will no longer start on the establishment of a WOP until they have carefully assessed the potential partner and are assured that the enabling environment will provide any necessary support to get the right start up conditions in place.

An example is WWN's recent experience in Mauritania. After preliminary discussions about setting up a WOP with Société Nationale d'Eau (SNDE) first assessment showed that the absorptive capacity of the mentee was not yet at the level needed for a WOP to have a good chance of success. The issue was that there were insufficient qualified staff available to work with WWN, and this was judged to be an essential factor for success and sustainability. WWN therefore approached the Minister of Hydraulics and Sanitation to engage his support in helping to prepare SNDE to get qualified staff in place. Over the next two years the Ministry appointed a number of well-qualified personnel to relevant positions within SNDE, which represented a first foundational step of capacity development for SNDE. Following the creation of this important condition, WWN and SNDE were able to start serious talks on implementing a future WOP.

This example demonstrates the importance of both doing a thorough assessment, and being able to engage political support to implement the necessary changes. It also demonstrates that capacity comes into place through different routes, in that while clearly there are still gaps, the capacity of SNDE has already been enhanced by the intervention of WWN that led to the appointment of qualified staff.

2.2.3 CHOICE OF METHODS

Selecting multiple methods to use together to achieve the 'best fit' can be a very effective way of maximising the strengths and mitigating the challenges of each component in the selection. However the combined array of needs and possible tools and techniques for response can be bewildering and often a strategic framework is needed to guide compilation of elements into a coherent and effective whole.

Many of the practices described below are linked, but all can have a clear and specific role to play in particular circumstances. As with the use of tools for assessment, a caution is needed about the use of tools for learning practices. No tool can provide 'the answer' to a problem, it can only be what the word tool suggests – a device to be used as a means of achieving something. In any setting tools must be used appropriately and skilfully if they are to be helpful and that is equally true for learning tools. The learning methods and tools chosen should be seen as a component of bigger facilitation processes, not the means to an end in and of themselves.

BOX 4: APPROACHES AND TOOLS FOR LEARNING FOR CAPACITY DEVELOPMENT

This box provides a short listing and general overview of some the wide range of approaches and tools that can be used to facilitate and enhance learning for different levels and groups in a WOP. More detailed information about each of these approaches and tools is available in the UN-HABITAT publication Training for Better Cities.

Technical Skills

For technical skills **customised training** (i.e. training that has been designed for the needs of a specific group) or **external training courses** (i.e. courses for which the content and curriculum are predefined by the provider) are the most common approaches, with follow-up **coaching and mentoring** providing the all-important support for implementation of learning. Other approaches to the capacity needs of individuals might include **academic study programmes**, either through attendance overseas or through some form of **distance learning** or **e-learning**. **Exposure or site visits** can provide invaluable opportunities to learn from what others are doing. **Experiential learning**, for which there are multiple methods, support individuals to learn from their own workplace experiences. **Blended learning** is the term used for working with a combination of different training and learning technologies and activities, usually including e-learning.

Strengthening Organisations

For strengthening organisations, there are three interrelated disciplines known as:

organisational development, change management, and organisational learning.

In summary, these involve working with coordinated learning and change techniques to move organisations towards the levels of capacity necessary to be effective and fulfil their organisational mandates. Knowledge management, considered by some to be a cross cutting issue in capacity development, is the process by which organisations generate value from their intellectual and knowledge-based assets. Leadership development processes are designed to enhance the leadership skills of existing and potential leaders within an organisation or system. Finally, many organisations can leverage new capacity through partnerships and networks. This can include twinning organisations with similar mandates, but different levels of capacity. WOPs are a prime example of this approach. In many respects all of these disciplines and approaches address the realm of intangible capacities that are necessary for an organisation to survive and thrive in a complex environment.

For Communities

For communities and other stakeholder groups different approaches are needed because the capacity needed is often more intangible than tangible. There are, for example, a number of methodologies that come under the heading of **communication**. These approaches, for example **World Café** and **Future Search**, generate or share learning through connecting people in structured activities where they access their collective knowledge and insights, or hear new messages from outside their group, and by so doing enhance and support learning and change within those communities. **Advocacy** and **behaviour change communication** are two specific communication approaches frequently used to achieve change in people's thinking, understanding and actions.

The final point to note is that any well-designed process will ensure that all activities are linked and appropriately sequenced. This means working through a repetitive loop of assessment, design, implementation and M&E, looping back to re-assess the next level of learning or change needed for continuous improvement and capacity development. When needs are complex the design sometimes involves a 'platform approach' in which one set of capacities is necessary as the platform for moving on to the next. Only when capacities in the first platform are well established and consolidated is it time to consider starting the next round of initiatives. Many WOPs complete one phase and start a new one to build on what has previously been achieved and

help the mentee move on to a new level of capacity. Such experiences are an ideal example of iterative and sequenced processes that help the mentee utility move forward through a steady and sustainable progression.

Diagram 2 illustrates where different approaches are needed because each have their limitations. Table 2 below describes how this translates to the practice and application of different methods by giving some examples. Because they go beyond training, the use of many approaches and tools call for the mentoring partner to think of their role as process facilitator rather than simply as trainer and mentor.

DIAGRAM 2: THE LIMITS OF TRAINING AND LEARNING¹¹

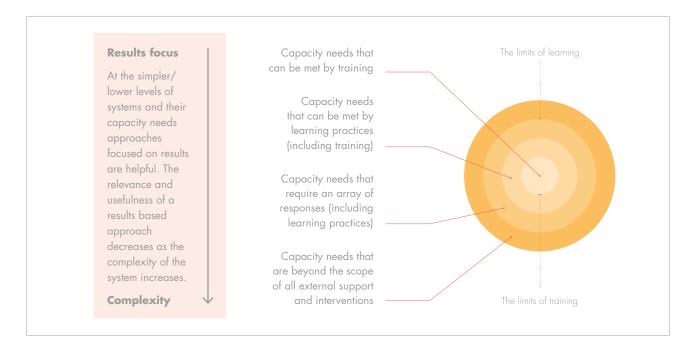


TABLE 2: THE USE OF DIFFERENT APPROACHES AND EXAMPLES OF APPLICATION IN WOPS

	Use of approaches	Examples of application in WOPs
Training	Traditional training approaches are very relevant for technical knowledge transfer and skills development. Training may be strongly oriented to problem solving.	Developing the technical skills needed to install and maintain meters in good working order.
Learning	Learning practices (including training) can be helpful for challenges that have social change and empowerment dimensions.	Working to establish sustainable community engagement with a waste water system might include features such as: advocacy about health and sanitation issues; education campaign to ensure community acceptance of the charge system; and so on. These issues cannot be 'trained'. The relevant capacity will only come into place through facilitation of community dialogue, possibly including conflict resolution ¹² .

¹¹ Adapted from Pearson J (2013) Training and Beyond: Seeking better practices for capacity development

¹² See the GWOPA Asia Case Study II for an example

	Use of approaches	Examples of application in WOPs
Broad capacity development approaches	Complex challenges require broad capacity development approaches that have multiple elements, including learning practices. At this level the overall goals need to be defined flexibly but some constituent parts of capacity could be specified through a Results Based Management style LogFrame.	Refurbishing large-scale water infrastructure for a city requires several types of capacity at different levels, including: legislation and policy frameworks; secure financial resources; municipal finance and planning systems; technical expertise; and change management skills. Training and learning practices alone would be insufficient to establish all these capacities.
Beyond capacity development	Some issues are beyond the reach of any capacity development approach. Complexity theory tells us that nothing can be predicted at this level of systems, so there can be no relevant capacity development frameworks.	The provision of water and sanitation services in slums is not simply a matter of capacity, it is the result of many other factors such political will and social relationships, power distribution, corruption, and local traditions of governance. Unregistered slum communities with no right to vote rarely attract significant political support or enough government resources to meet their needs.

2.2.4 APPLICATION OF LEARNING¹³

Training practice, even though described as a cycle, traditionally follows four sequential steps that conclude at the end of the training event, they are: assessment; design; delivery; and evaluation. However, within industry, government and education, awareness has long been growing that this approach to training has serious limitations as the mechanism to bring about sustainable change in workplace practices. Very often training fails to achieve the desired impact because the learning acquired in training settings is only partly applied, and sometimes not at all. This is especially true in complex contexts where a simple, single focus and linear process is inevitably limited in terms of meeting needs that are multi-dimensional. Both academics and practitioners have come to understand the limitations of training. This has led to the identification of a broader specification of the training cycle, namely 'Transfer of Learning'. It is important to note that this is not about the transfer of learning from one person to another, or from one entity to another, but 'the transfer by an individual of learning acquired in one setting to another setting'. This approach, which is supported by both a body of theory and quidance for practice is now considered to be best practice for training and for evaluation of its effectiveness.

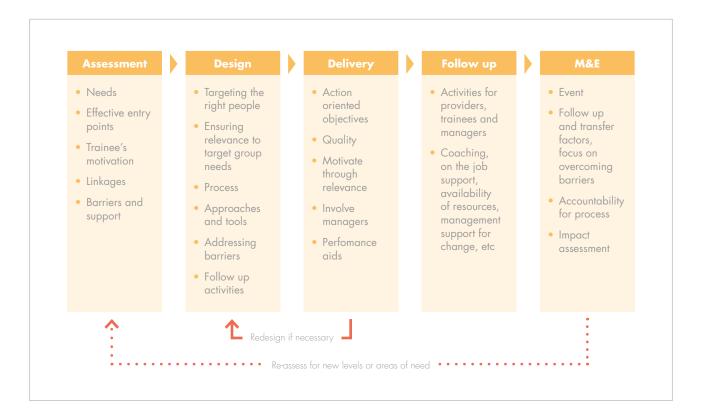
Indicators of successful application of learning include both positive changes in performance on specific tasks and an enhanced ability to learn, and to learn more quickly, in response to other workplace challenges and opportunities. An example might be training staff of a water utility to launch an education campaign about water charges. If application of learning has been successful the staff would not only be able to complete the current campaign, they would also later be able to apply the learning to new advocacy campaigns on different issues. Diagram 3 below gives a visual representation of the application of learning process.

Successful application of learning by individuals should, arguably, also contribute to organisational level learning, because the two are recognised to be inextricably linked. The ability to learn at both individual and organisational level has been identified not only as a requirement for other types of capacity, but also as a capacity in its own right for organisations to be able to adapt and self-renew in situations of rapid change in complex environments. ¹⁴ This is particularly true for water utilities that might be facing emerging challenges such as those caused by climate change, or the changing demographics of rapid urbanisation.

¹³ This section is adapted from the UN-Habitat publication Training for Better Cities op. cit. Other useful sources of information about Transfer of Learning are http://www.nwlink.com/~donclark/hrd/learning/transfer.html accessed 1.11.2013 and http://www.hrsdc.gc.ca/eng/hip/lld/nls/Publications/A/transfer-a.shtml accessed 1.11.2013

¹⁴ See for example ODI (2008) Overseas Development Institute Working Paper 285 Exploring the science of complexity: Ideas and implications for development and humanitarian efforts available at http://www.odi.org.uk/resources/download/583.pdf and European Centre for Development Policy Management (2008) Capacity Change and Performance Study Report available at http://www.ecdpm.org/Web_ECDPM/Web/Content/Download.nsf/0/5321BD4DC0C1DB09C1257535004D1982/\$FILE/PMB21-e_capacitystudy.pdf

DIAGRAM 3: THE APPLICATION OF LEARNING PROCESS



Research has shown that, apart from the issues of good design and delivery, the key factors for successful training are:

- Appropriate targeting: developing the right training content to match the participants' needs;
- Building in the expectation and practice of follow up activities from the start, and then holding the relevant people accountable for their implementation; and,
- Ensuring line management engagement and support for participants' application of their learning.

It is clear from case studies that many of the training practices in WOPs adopt key features of good practice for application of learning. This is most apparent in the training arrangements that:

- Are demand driven, and agreed by management as the right approach to solve a particular problem;
- Include short mission visits by mentoring experts who use targeted training to address very practical learning needs;
- Build in an expectation of application of learning between mission visits, with subsequent visits being focused on solving the problems of application;
- Ensure that trainees have the resources to apply the learning (e.g. a supply of meters to install); and,
- Have clear criteria for assessment of success (e.g. the number of chemists able to manage water quality correctly without expert support).

What is not clear is whether or not this good practice is happening as a result of knowing about the theory, or simply by instinct, most likely the latter.

3. WHAT WORKS IN WOPs?

3.1 RESOURCES AND EVIDENCE AVAILABLE

While there have been and continue to be many WOPs, few have been written up in sufficient detail for others to understand the full intricacies of the capacity development process and results. Even the helpful case studies that exist do not go into detail about capacity development and training practices. Similarly, interviewees for this paper have been with senior personnel within WOPs, concerned more with the strategic formulation of the partnerships than the details of implementation. With the exception of one recent paper about how to define capacity development results¹⁵, there appears to have been little interest thus far in documenting the details of learning practices. Of necessity, therefore, what follows is to a certain extent supposition. However, there is sufficient information available from various sources to assert that what is presented here is likely correct.

Appendix 1 gives the list of interviewees and documentation consulted.

3.2 OVERVIEW OF CURRENT CAPACITY DEVELOPMENT PRACTICES IN WOPS

3.2.1 CAPACITY DEVELOPMENT IN WOP AGREEMENTS

As noted above there are many different routes and arrangements by which WOPs come into being. There are also many different arrangements for establishing the financial and other support resources needed for a WOP to function effectively. While it is not the purpose of this paper to examine those different practices, it needs to be noted that they can and do affect the purpose and nature of the partnership agreement and what activities will be undertaken. For example, Waterlinks' core activities are, firstly, to support WOPs and strengthen partner capacity through the development and implementation of training programmes, and, secondly, the production of knowledge products such as toolkits, guidelines and applied research. The way Waterlinks works is to be the catalyst for short-term, focussed, bi-lateral partnerships based on technical training needs. By contrast, the WOP in Bulawayo was multi-partner and multi-issue, with a donor project lasting almost three years, and a partnership between the two operators continuing beyond the donor project period (see Box 6).

A holistic approach would hold that the entire WOP is about capacity development, whereas the tendency is to define the WOP as a problem solving exercise with capacity development, if mentioned at all, confined to the staff training component.

What is common to all WOPs is that they focus on aspects of service delivery, which may either be the need to solve a problem (including that of staff knowledge and expertise), or to introduce a new feature of the system to enhance the quality or range of services provided. All cases will involve an element of capacity development, though how it is defined in the partnership agreements and documents is again something that varies significantly from one case to another. A holistic approach would hold that the entire WOP is about capacity development, whereas the tendency is to define the WOP as a problem solving exercise with capacity development, if mentioned at all, confined to the staff training component. This means that most usually the goals of WOPs are formulated in terms of the problem to be solved or the target level for improved service delivery, with capacity development only sometimes being a part of the overall goal and objectives framework. The examples in the boxes below illustrate different types of WOP activities, across different timeframes, within the broad spectrum.

BOX 5: TRAINING FOR COMPETENCY STANDARDS

The Penang Water Services Academy (PWSA) is the dedicated facility of the water supply corporation of Penang, Malaysia, (Perbadanan Bekalan Air (PBA)) for training water supply industry personnel (Malaysian and foreign). The PWSA mission is 'to facilitate and provide "real world" technical education and training programmes to the water supply workforce of today and tomorrow'. The training academy has both classrooms for learning theory, and an array of state-of-the-art indoor and outdoor laboratories for hands-on practice. All instructors are water sector professionals with many years of first-hand experience.

The PWSA programme was designed based on the Malaysian National Occupational Skills Standard (NOSS), which was developed by industry experts to outline the competencies requirements for different occupations in the water sector. Using the NOSS format, PBA have developed a set training programmes to achieve the 14 different competency standards for the various disciplines of water engineers (supply, and waste and sanitation). Within each standard there are specifications set out for different levels of competence which link to clearly defined job profiles for different grades of staff within the discipline. For example for water treatment plants there are six levels of job profile: Operator, Technician, Senior Technician, Engineer/Executive, Assistant Manager, and Manager. This represents an important aspect of overall capacity for the Malaysian water sector in that this set of standards is an enabling condition for the industry.

In keeping with their own mandate, PBA-PWSA have undertaken WOPs that are training for technical disciplines. Following assessment of training needs against the competency standards, utility staff are trained at the academy. Academy trainers then do follow-up visits to the participants to support them in implementation of their learning. They also consult with line managers and human resource departments about progress, and whether or not trainees are ready to be trained on the next level of competence within the standard.

While the approach taken by PBA-PWSA does not fit to the strict definition of a WOP, the partnerships in which they engage have the purpose of developing capacity through technical training for individuals. However, they have noted that few other countries in the region have competency standards for the water sector. If PBA-PWSA were able to work at a more strategic level in those countries to facilitate the development of national competency standards, they would be contributing to overall capacity by creating enabling conditions at the institutional level.

Information sourced from interview with and documents provided by the Manager of PBA-PWSA.

BOX 6: BULAWAYO WATER AND SANITATION EMERGENCY RESPONSE (BOWSER)

The BOWSER project in Bulawayo was established in response to an emergency in all of the city's water systems, which carried serious inherent health dangers. The breakdown of services over time had been accompanied by increasingly vocal anger and frustration in local communities. The aim of the WOP was: Reduced vulnerability to waterborne diseases by improved sewerage, water supply systems, capacity building and hygiene promotion.

There were two water operators at the heart of this WOP, Bulawayo City Council (BCC) in Zimbabwe, and eThekwini Water and Sanitation, City of Durban in South Africa. However, many others were involved including a donor, two non-government organisations (NGOs), an engineering consulting company, and several local business and community groups.

The approach to meet the aim was a combination of rehabilitation and repair interventions, training and advice, public health and hygiene promotion campaigns, establishment of a call centre, creation of a geographic information system facility, etc. The complex set of responses to needs required time to implement and the main project period was almost three years. The planning framework covered short, medium and long-term objectives and activities in order to appropriately sequence the extensive range of activities, to ensure sustainability and to help secure investment,

This WOP is a very interesting example of a multi-dimensional approach to a range of needs addressing relevant issues within the entire Bulawayo water system. This included both specific tangible capacity needs within the water utility and, importantly, intangible capacities in its operating environment, most particularly with its consumer community, and the utilities ability to engage with them.

Information sourced from GWOPA/UN-HABITAT's Water Operators' Partnerships in Africa Case Study 3.

BOX 7: BELIZE WATER SERVICES AND CONTRA COSTA WATER DISTRICT

The WOP between Belize Water Services (BWS) and Contra Cost Water District (CCWD) in California was a pioneer in the initiative for water utilities in the USA to provide training partnerships with water utilities in developing countries. The USA utilities are tasked with providing on-site training, skills development, and best practices exchange, modified for each partnership according to need and priorities for the mentee utility. The duration of the first phase of the WOP was one year with a second, follow-up phase now in preparation.

The process to negotiate and formulate the WOP agreement included a visit to BWS by senior CCWD personnel. Once concluded, the negotiations arrived at an overall framework for the WOP of two visits by BWS managers and senior technical specialists to CCWD, with a follow-up support and assessment visit to BWS by CCWD personnel.

The first BWS team to visit CCWD were senior managers in Operations, Technical Services, Customer Services, and IT and 4 staff from Finance, Customer Service, Operations, and Meter Reading. This visit was designed to offer an interesting mix of formal training inputs, orientation to new/different working practices through site visits to CCWD facilities, and action planning for BWS improvements. CCWD designed a programme that gave BWS team members a combination of group time on cross cutting issues of priority such as safety, and individual programmes relevant to their technical discipline.

The second BWS team to visit CCWD were the Senior Finance Officer and 6 staff from Operations, Technical Services, Customer Services (2), Water Treatment Operator, District Manager, and Safety. They undertook a training and exposure programme focused specifically on areas of need identified in the action plans put together by the first team.

The third key activity was the visit by five CCWD personnel to assess progress against the action plans, provide advice about challenges of implementation, and recommendations for next steps to achieve further improvements. The findings of the assessment process were that significant progress had been made in many areas of operations and organisational functioning.

Between visits, when implementing the action plans, BWS personnel were able to access 'real time' advice from their CCWD counterparts. On occasions when BWS staff ran into an operational challenge linked to the plan they were able to call their CCWD to talk through what was happening and find a way forward. The immediacy of this support was much appreciated by the BWS team and also helped to keep the CCWD team engaged and up to date with developments at BWS.

This WOP is interesting because although it was initially short term (it has since been continued), the approach was holistic, covering a range of BWS operational and organisational functions, based on the prioritisation of some specific technical problems, and the cross cutting issue of safety. It also highlights that time and attention given to developing relationships during face-to-face visits can prove invaluable for supporting communication and problem solving during other phases of the WOP. Although currently there is no formal project in place, the relationship developed between the utilities is so strong that support continues to be given in informal ways.

Information sourced from Action Plan and Results Report, August 2012, provided by CCWD.

3.2.2 KNOWLEDGE AND SKILLS TRANSFER

There is only summary information available about how knowledge and skills transfer actually happens in WOPs. Most descriptions of WOPs, including documented case studies, give little detail about the actual approaches and practices of capacity development, and sometimes none at all. There are, however, enough examples of summary information, to be able to conclude that the predominant approach is technical skills training for individuals. This training takes place in a variety of formats, such as:

- Formal training courses that offer a mix of theory in the classroom and practice in laboratories or on site;
- On-the-job training;
- Peer-to-peer problem solving;
- Site visits;
- Joint planning and work; and,
- Exposure and study visits to water utilities in other countries.

In general, technical specialists and or trainers provide the important follow up component of the training cycle through on-the-job mentoring during subsequent mission visits.

There is insufficient documentation about other aspects of capacity development, including work to develop intangible capacities such as those needed for effective consumer relations, to draw any conclusions about the approaches being used. (One exception analyses engagement between utilities in Malawi and the Netherlands for opportunities to influence policy. (Similarly, very little has been noted about work at the organisational level. However, the case study on the WOP between Mwanza Urban Water and Sewerage Authority (MWAUWASA) and Dunea (see Box 8 below) is an exception in that it details two interesting aspects of capacity development. The first concerns the billing database and the second is about employee engagement. While there must, undoubtedly, be cases where it was necessary to put legislation or other conditions in place before a WOP could be considered, there is virtually nothing documented about capacity development at the enabling environment level, and this is an area worthy of further investigation.

BOX 8: MWAUWASA DATABASE

Various actions were put in place to reduce the estimated 30% commercial losses on billable production at MWAUWASA. Alongside solutions to solve physical problems in the infrastructure such as faulty meters and illegal connections, another important action was to 'clean-up' the database in order to improve billing. An unusual additional component of the WOP, in response to an approach by the local union, was an employee satisfaction survey, the first known to have been conducted within a WOP.

The approach adopted by the partners to clean up the database was twofold. Firstly, training and practical support to resolve the current problems with the database and, secondly, facilitation of the process to establish preventative measures to ensure similar problems do not arise in future. In total the Dunea database specialists made five visits, approximately three months apart, of two weeks each. In the first visits they gave very practical on-the-job training to the MWAUSAWA staff about getting the database into good shape. They followed up with mentoring support to help work through any challenges arising in implementation. Once the database was clean the Dunea experts changed their focus to facilitating the MWAUSAWA staff to design and implement a system and procedures to ensure that the database remains accurate. Thus, this component of the WOP started with technical skills training for individuals for database management, and then moved on to helping establish organisational level capacity in the form of creating the systems and procedures needed for effective functioning and the prevention of problems.

The second, and unique, feature of this WOP is the 'Employee satisfaction' study, conducted by another partner, Abvakabo FNV, the largest Netherlands public sector trade union, who worked in collaboration with TUGHE, a Tanzanian trade union. The research used both quantitative and qualitative methods to assess employees' views about: general job satisfaction; working time and payment; organisation of work; and, the work environment, health and safety. The analysis and conclusions from the survey led to a clear and comprehensive set of recommendations for MWAUWASA, for the workers councils, and for TUGHE. Consulting the staff in this way not only generated a great deal of useful information for MWAUWASA management to improve their human resource management, but also, by making them feel valued, served to improve employee motivation and commitment. There will be a follow up study to assess changes resulting from the recommendations in two years' time.

Information sourced from Water Operators' Partnerships in Africa: Case Study 2 – Dunea MV and Mwanza Urban Water and Sewerage Authority, 2013.

3.2.3 QUALIFICATIONS AND SELECTION OF TRAINERS AND MENTORS

Trainers and mentors come to their role in WOPs by a variety of routes. The arrangements for selecting staff to participate in WOPs vary between the different organisations involved. Whatever the internal arrangements may be, a common factor is that those arranging and managing WOPs call on qualified practitioners from within their own utility. The first criterion for selection is, understandably, that the staff selected to work in the WOP are qualified and experienced in the relevant technical discipline. After this, the choice of who will be selected is frequently done on a simple rotational basis in order to give opportunities to all, i.e. whose turn is it next? One of the issues that mentees raise is that they are rarely involved in the selection of the staff who will work with them, which can sometimes create tensions if the fit does not prove to be a good one.

By way of preparing the mentor staff member for their work in a WOP few, if any, mentoring partners provide any training skills development before missions. Some provide cultural awareness workshops, but have found these lead to mixed results. Others ensure that when someone goes on mission for the first time, they are accompanied by a more experienced trainer/mentor. From the interviews conducted with mentor partners, it

appears that the overriding assumption is that the strength of the arrangement is in the peer-to-peer nature of the relationship between mentor and mentee and that formal training skills are not, therefore, required.

Many mentoring partner organisations now see participation in a WOP as an important part of their own internal staff capacity development and career progression policies. Opportunities to participate in a WOP are often keenly sought by young professionals wishing to enhance their experience. WOPs are also seen as a way to motivate and bring added job interest to experienced staff who have been in their positions for a long time.

3.3 CONDITIONS THAT SUPPORT LEARNING

It is important to note what case studies and other documentation ¹⁷ have identified as being the most important conditions that support success in WOPs. Not all of these are directly relevant to the capacity development aspect of the partnership, but it is unlikely that the WOP would result in capacity having been developed unless these other conditions are in place. The conditions can be grouped under some key headings, as follows:

Enabling conditions for the WOP to function

- Political support and senior management commitment to mandate change. This is needed before the WOP
 to ensure it is established appropriately (see case study in Box 3 above), and during implementation to
 facilitate problem solving in the enabling environment;
- Sufficient funding (though the required minimum is often quite low) and other resources for necessary activities to be completed; and,
- Key stakeholders, especially donors, appreciate the importance of capacity development and are willing and able to commit the time and resources for effective processes to be implemented alongside work to achieve operational performance targets, and, where necessary, support infrastructure investment. (Investments are not essential to the development of a partnership but can help to foster results depending on the specific working item chosen, for example, NRW. A number of success stories have noted that the joint approach of capacity development concurrently with investment in infrastructure is one of the factors contributing to success. Conversely, it has been noted that in some cases the lack of investment has created restrictions for staff to use existing or newly acquired capacity.)

The right starting point

- Ideally, but not always, WOPs are demand driven, based on the mentee utility's own assessment of their
 challenges and needs. If the mentee does not have the capacity to make such an assessment the role of the
 mentor is to facilitate the process, which can be a capacity development exercise in its own right (see Box 2
 above); and,
- The design of the WOP formulates achievable objectives that match the absorptive capacity of the mentee partner. Failing to take appropriate account of the existing capacity as the starting point, and or being too ambitious both risk setting up failure.

A strong planning framework

- A shared process to create a strong planning framework that defines clear objectives and indicators not only
 for operational performance targets but also for capacity. (The more comprehensive the WOP in terms of
 addressing capacity needs, the more likely it will be to create sustainable results); and,
- The planning framework has built in flexibility to allow for appropriate responses if there are significant changes in circumstances during implementation (and contractual agreements recognise this need).

The overall WOP process creates conditions conducive to learning

- An introduction phase to allow relationship building, especially at the level of operational staff who may not
 have been involved or consulted in earlier stages of the WOP, and getting in place all other components,
 including a comprehensive plan;
- A slow start with a focus on clear tasks that can demonstrate success in order to motivate for ongoing work;
- Challenges and mistakes are used as learning opportunities for all;
- Regular, reflective review processes to identify progress and learning; and,
- The contractual space to respond flexibly to changing circumstances.

Quality of the relationships within the partnership

- Relationships of trust and the time to build them. The mentee partner needs to be able to trust in the mentoring partner's organisational capacity and in the individuals working with them;
- Appropriate matching of expertise to need peer to peer within technical disciplines, with the mentor(s) having sufficient expertise to inspire trust and respect from the mentee(s) and having the right attitude to respect what the mentee staff are already able to achieve, sometimes in very challenging conditions;
- Understanding that WOPs are a mutual process, in which trust and respect need to be built on both sides, and that learning is a two-way process. This also involves cross-cultural sensitivity; and,
- Recognition of the value of long-term relationships for iterative processes.

A related point is that there are a number of cases where a water operator that was formerly a mentee is now mentoring others. This cascading effect is particularly useful where operators can act as mentor in their own country or region, because this means that some of the challenges of language and cross-cultural working noted above are less likely to arise. Costs are also likely to be less, allowing more to be done with the available resources.

3.4 FACTORS THAT CAN IMPEDE LEARNING

No WOP will be without its challenges of one form or another, at one time or another. The evidence from documented cases indicates that the main challenges fall into three key groups: language and cross-cultural working; insufficient diagnostics at the start, linked with unhelpful assumptions; and, lack of guidelines for those new to WOPs.

Language and cross cultural working

In the majority of WOPs the mentor and the mentee/s, particularly at the level of operational personnel, do not share a first language. In some cases there is, perhaps, a shared language, but that may be a second language for both. In other situations there is no shared language at all. It is, of course, always possible to overcome language challenges through the use of interpreters, but this solution may have some inherent problems if the interpreter is not familiar with the technical terms needed for accurate translation.

In addition to the challenge of language, a range of issues may occur as a result of cross-cultural misunderstandings, such as those noted in Section 2.1.3 above about learning in different cultures. The difficulties may extend to other forms of communication and behaviour in which one side may inadvertently confuse or offend the other through lack of knowledge of each other's culture.

Insufficient diagnostics and unhelpful assumptions

The water system in Mwanza is not the same as the water system in Madrid and it never will be. While water systems will share many common features wherever they are in the world, no two systems will ever be exactly

the same. A large number of factors both within the water system itself, and in the surrounding environment (physical, social and economic) will vary significantly to create a unique entity in unique circumstances. Breeveld et al¹⁸ argue for a careful approach regarding policy transfer for institutional capacity building, and this is also relevant at the implementation level because it is not helpful for assumptions to be made about dealing with challenges in a mentee's water system in the same way as in the mentor's system.

As noted above, doing a full, participatory assessment of all relevant and related aspects of the system before deciding on possible solutions is important. It has been noted that sometimes the involvement of third party facilitators or mediators during the start-up phase can create misunderstandings that lead to complications during implementation. Additionally, insufficient diagnostics in the start-up phase carry inherent dangers of costly mistakes being made, if planned activities are based on assumptions of a system functioning in exactly the same way as that of the mentoring partner or on the perspectives of an overly narrow set of stakeholders.

Lack of guidelines for those new to WOPs

Those new to working in partnerships can find it a challenge to know where to start and how to proceed. It is unlikely that on either side many, if any, personnel with have direct experience of assessing capacity needs, designing and implementing responses. At present there are few tools available to help those new to being in a WOP either as a mentee or as a mentor. Filling this gap is one of the aims of the BEWOP project.

3.5 GAPS IN THE AVAILABLE INFORMATION ON LEARNING IN WOPS

There are a number of important gaps in the available information, most significantly: how best practices are identified and transferred; M&E processes for capacity development; understanding the relevance of motivations for learning to lead to change; and understanding capacity development at the enabling environment level. Another very important gap is any information about learning that can be gleaned from mistakes. More information about these issues would undoubtedly lead to clearer understanding of how to make learning approaches more effective.

Identification of best practices

Some case studies make reference to the transfer of 'best practices' 19. Yet there is no information given about how any given practice is identified as being 'best'. More importantly there is no information available about how, if at all, any practices are reviewed and adapted to fit to local circumstances. As noted in Section 3.4 above, significant challenges can arise when assumptions are made that what works in one context will also be relevant and useful in another.

M&E processes for capacity development

There are no known documented examples of capacity development initiatives being monitored and evaluated in their own right. Even in cases where capacity development is specified as a goal or objective of the WOP, this does not appear to follow through to the formulation of capacity indicators, or any specific capacity monitoring activities. The M&E systems in place in WOPs relate to solving problems for the achievement of service delivery targets, rather than evaluating progress of the CD process.²⁰ The prevailing assumption is that if the problem has been solved capacity must now be in place. Another factor is that M&E tends to be donor driven in that (most usually) the mentor is accountable to the donor for delivery of results specified in the funding agreement.

Learning from mistakes can be one of the most valuable resources for ensuring future success. Unfortunately few organisations in any sector are ever willing to make their mistakes public. At the present time all the WOP case study materials available are about successes, with the exception of those that are currently the subject of

¹⁸ Breeveld et al, op. cit.

¹⁹ See for example, GWOPA Asia Case Study 2

²⁰ See Pascual et al, op. cit. for a detailed analysis of this issue

academic research. It would add a great deal to the knowledge about how to make WOPs more effective if the findings of M&E processes that had identified mistakes were shared for the benefit of all.

Motivations for learning and change

There is increasing recognition in the capacity development discourse that motivation to change can be a critical factor in the success or failure of any initiative. In many cases well-intentioned actions do not lead to good results because the target staff are not motivated to learn and change, or they may be motivated to learn, but have no incentives to support change. Often this is about financial incentives, however other factors, especially the distribution and use of power in the local political economy, can be very substantive disincentives to learning and change. Finally, it is important to understand the motivators for change in the enabling environment, i.e. at the level of political and policy decision makers. Thus far little has been done to explore and understand these important issues at any level in WOPs.

Understanding capacity development at the enabling environment level

As noted at several points above having the right conditions in the enabling environment can be crucial for the success of a WOP. While undoubtedly there must have been instances where interventions led to the creation of capacity and enabling conditions at this level, little has thus far been documented. Having greater understanding of how to create change at this level could, potentially, lead to considerable improvement in the effectiveness of WOPs.

4. DIMENSIONS OF A LEARNING FRAMEWORK FOR WOPs

This section of the paper draws together into a single framework key features of the theory of capacity development set out in section 2, with the available knowledge of current practices in WOPs set out in section 3. It suggests a framework that may serve as a guide for some aspects of the conceptualisation and design of WOPs, in order that capacity development becomes a clear goal within the WOP agreement. In turn, this should lead to learning activities to achieve the goal being made more explicit and thus more effective in the implementation of future WOPs.

In Progress and Challenges in Knowledge and Capacity Development²¹ Alaerts and Kaspersma set out a matrix for knowledge and capacity development for different levels and actors in the water sector, including civil society, i.e. consumers. While there are some significant similarities between that matrix and this framework there are also some notable differences. This is largely due to the fact that the framework offered in this paper focuses specifically on WOPs rather than the water sector in its entirety. This framework also draws on a synthesized understanding of capacity and its development as set out in the Learning Package for Capacity Development²² whereas the Alaerts and Kaspersma matrix draws on theory from a range of different analytical disciplines. Despite the differences, this framework can be seen to be taking forward some of the foundational ideas set out by Alaerts and Kaspersma, by applying some more recent understanding of the theory and practice of capacity development.

4.1 OUTLINE OF A GUIDING FRAMEWORK

Any framework for capacity development must have as its starting point a definition of capacity that clarifies 'Capacity for what?' It also needs a definition for the process of capacity development. In the context of WOPs the following definitions apply:

For water and sanitation operators, capacity can be defined as the ability to sustainably deliver quality services to all within their target communities.²³

Capacity development is understood as the process facilitated by WOPs whereby water operators unleash, strengthen, create, adapt and maintain their capacity.

These definitions inform the elements set out below as the components of the framework.

The framework builds, in particular, on the understanding of two key aspects of capacity discussed in Section 2 above. These are the different levels at which capacity can exist, specifically individual, organisational and enabling environment, and that capacity has tangible and intangible forms.

4.2 THEMES

The range of capacities needed for water operators to function effectively fall into four main themes: technical, managerial, governance, and consumer relations. Although there is a significant level of crossover between

²¹ Alaerts, G. J. & Kaspersma, J. M. (2009). Progress and challenges in knowledge and capacity development. In: Capacity Development for Improved Water Management. Blokland, M. W., Alaerts, G. J. & Kaspersma, J. M. (eds). Taylor & Francis, London, UK, pp. 3–30.

²² Learning Package for Capacity Development available at www.lencd.org/learning accessed 1.11.2013

²³ In this context the key dimensions of *sustainability* are financial (cost-effectiveness being one aspect), social (including questions of equity, non-discrimination and participation) and environmental (sustainability of services). The phrase '*quality services*' encompasses the concepts of availability, affordability, accessibility, and acceptability.

these themes, especially between governance and consumer relations, each is worthy of consideration in its own right.

Technical

There is a very substantial range of technical disciplines and expertise that a utility needs in order to function, any or all of which might be the subject of a WOP. These technical disciplines fall within the category of tangible capacities. What to do and how to do it are very practical needs, which Alaerts and Kaspersma discuss as tacit knowledge, which is best acquired '... through one-on-one interaction between junior and senior, apprentice and teacher.' Technical and tacit capacity needs are very often problem based. It should also be noted that the need for technical capacity does not apply only to service delivery and the management of the water infrastructure, but also within the organisational functioning of the utility. The MWAUWASA example given above illustrates the important need for technical skills in information and communication technology (among other needed capacities), and another key technical area is financial management.

Managerial

Intangible capacities are especially important at the managerial level if the utility is to be well-managed for effective service delivery. These include: leadership; analytical and problem solving skills; the ability to build and motivate teams; conflict resolution; and, the skills to engage in effective stakeholder relations. Without these important intangible capacities in place it is unlikely that other capacities will be used fully and appropriately. The range of capacities needed for effective and efficient management of water utilities includes tangible capacities such as systems and procedures for planning, budgeting, human resource management, M&E, and so on.

Governance

- The four pillars of good governance are usually defined as accountability, transparency, participation and predictability²⁵. The general meaning of each is as follows, though it needs to be noted that each may have a nuanced variation according to context.
- Accountability means making public officials answerable for their behaviour and responsive to the stakeholders from whom they derive their authority;
- Transparency refers to the availability of information to the general public and clarity about government rules, regulations and decisions, and how these affect both public and private sector functioning.
- Participation is the active involvement of stakeholders in the decisions that affect their lives. Participation implies that government structures are flexible enough to offer stakeholders the opportunity to improve the design and implementation of public policies, programs, and projects; and,
- Predictability is (i) the existence of laws, regulations, and policies to regulate society, and (ii) their fair
 and consistent application. It allows individuals and entities to keep planning future activities, with the
 expectation that conditions will not suddenly change. Predictability is complemented and reinforced
 by transparency.

Consumer relations

Issues like consumer relations do not usually get much attention in capacity development initiatives. However, for water operators, success or failure may depend on the quality of their relationships with consumers in the communities they serve. Consumer relations may have multiple dimensions, including very practical matters like community involvement in planning processes, or employing community members to work on the installation of systems. But it also covers less tangible matters like education and advocacy on the health benefits of linking

²⁴ Alaerts and Kaspersma, op. cit. p15

²⁵ This section is amended from Asian Development Bank, Operations Manual, Section C:4, issued 23 December 2013 available at http://www.adb.org/sites/default/files/OMC04.pdf accessed 4.11.2013

up to a proper wastewater and sanitation system. Given that improving and extending services is the ultimate goal of most WOPs, reaching out to the consumer can be critical to achievement of the MDGs, and the Human Right to Water. It is therefore important to recognise this as an essential area of any water operator's capacity.

4.3 WHO NEEDS TO LEARN WHAT? WORKING WITHIN A HOLISTIC CAPACITY FRAMEWORK

As well as thinking about themes, it is also important to think about the different levels at which capacity needs to be considered, and the linkages between the levels.

Individuals

This level is primarily, but not exclusively, the water operator staff who actually run the utilities and make them function – the engineers, operators, technicians, chemists, planners, administrators, managers, etc. Many, but not all, needs at this level are in the realm of tangible capacity, or tacit knowledge. It is about having the knowledge and skills to be able to do things. Very often staff in mentee utilities do have a lot of skills and knowledge that are not fully recognised, and capacity development initiatives need to ensure that activities build on what already exists, rather than ignoring it. All also need to have the intangible capacity to be able to work in teams, and to engage consumers and other stakeholders in meaningful ways. This level also extends to others within the broader system, especially the consumers, who need to be well informed about key factors of water supply, sanitation, and their usage. Another group of important individuals are the policy and decision makers in the enabling environment.

Organisation

Depending on the nature of the WOP the focus on the organisation focus might be the whole utility or just one department or section within it. This may be either specific capacity needs such as human resource management, or it may be the need to look at organisational learning as a key to continuous performance improvement and sustainability. A transformational idea that Belize Water Services gained from Contra Costa Water District (see Box 7 above) was that safety is an organisational issue, in that it is not simply the responsibility of a safety officer, but that every individual has responsibility for safety, which the whole organisation needs to facilitate. As noted previously, the learning at organisational level is a mixture of both tangible capacities for operational functioning and intangible capacity for adaptation and sustainability.

Enabling environment

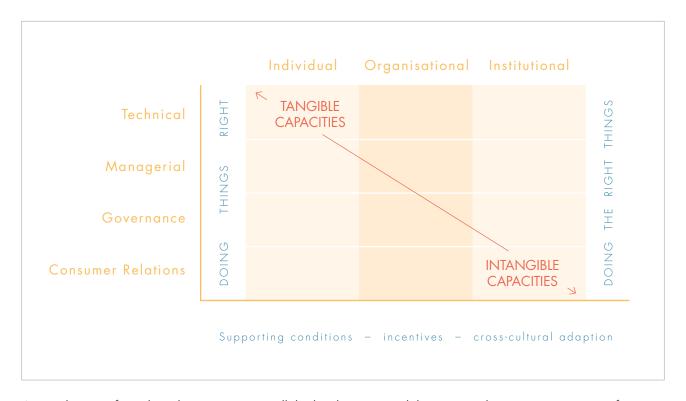
The institutional level of the enabling environment includes different types of agency, within all of which the issue of learning cannot be considered in isolation from political will. First are the local and national governments responsible for enabling legislation and other conditions. These actors need to learn about what works, current circumstances for any given utility, and how they can be most effective in supporting change and improvement, or to put it another way, how to become more enabling. It appears that it is rare for politicians and or senior policy makers to be actively involved in WOPs in any way, yet they can be highly influential for good or otherwise. For example, if local politicians refuse to allow reasonable increases in charges the water operator may not be able to achieve the financial sustainability necessary to ensure long-term, high-quality service provision. In some situations more needs to be done to promote capacity and change at this level in order to enable and facilitate more change at the organisational level. The second group are the donors and finance institutes who are frequently needed to support WOPs, and who are, in many cases, the only viable sources of support for substantial infrastructure investment. These actors also need to learn about what works in local circumstances, and how they can become more enabling.

Mentoring partner

Finally, there are the learning needs of the mentoring partner to take into account, which are different to those of the mentee partner. For example, for staff preparing to go on mission as a trainer or mentor, the learning agenda is about how to understand and assess situations that may be very different from those in which they are used to working. Organisations that routinely send staff overseas to work in WOPs would need to draw lessons learned from previous experiences. The consolidated learning from multiple WOPs would be an important resource for internal purposes and for sharing with others concerned with improving the design and implementation of WOPs.

The schematic offered below in Diagram 4 is a way of showing all of the issues and dimensions discussed above that would ideally be considered and, where relevant, explored in depth before decisions are made about how to proceed.

DIAGRAM 4: SCHEMATIC OF A CAPACITY DEVELOPMENT FRAMEWORK FOR WOPS



As can be seen from the schematic, putting all the levels, types and themes together creates a picture of considerable complexity. It is not intended to suggest that any WOP could or should cover all dimensions of the framework. It is intended, however, to provide guidance about how to approach assessment and design phases of a WOP. Using this framework can help to ensure that even if the WOP is to focus on a single issue, consideration is given to other factors and issues in the mentee utility or its environment that might impact on the success of the intervention. The framework might also help to broaden thinking so that helpful linkages are made at an early stage and then lead to more comprehensive approaches to the challenge under consideration.

5. CONCLUSIONS AND RECOMMENDATIONS: PULLING IT ALL TOGETHER

This paper has sought to draw together what is currently thought to be the most effective approach to capacity development with what is known of the current practice in WOPs. Within this analysis primary attention has been paid to learning approaches and practices for the transfer of knowledge and skills, and the development of other capacities necessary for effective water operator functioning.

As noted at various points in the paper, there are some important gaps in the available evidence about what is currently happening in WOPs. While there is general evidence that there are many successful practices, there is, as yet, very little evidence about the details of how change is being facilitated. Nor is there any evidence available about what has not worked and why. There may in fact have been some very significant failures, but these are not well documented. It is not therefore possible to draw any substantive conclusions about current practice. More investigation is needed before existing approaches, tools and techniques can be analysed comprehensively for their relevance and effectiveness.

The framework offered above may provide a useful tool to those assessing needs and designing a new WOP in response. While many will be able to use the information directly in design or refinement of their WOPs, it is the intention of the BEWOP project to build on this framework, and adapt it so that it may be considered a practical tool for WOPs implementers and supporters.

5.1 RECOMMENDATIONS

- Undertake research that will provide better understanding of learning approaches as they are currently used in WOPs, and the factors that support or block successful application of learning;
- Seek ways to fill the gaps in current knowledge about other aspects of capacity development in WOPs as detailed in 3.5 above;
- Develop a format and guidance for framing capacity goals, and learning objectives and indicators in WOP agreements;
- Develop a format and guidance for including M&E of capacity development approaches in the overall WOP M&E framework; and,
- Explore how best to develop the framework above as a helpful tool for those negotiating new WOPs. This might be the creation of a checklist or assessment guidelines, which could then be piloted.

APPENDIX: INTERVIEWEES, INFORMATION SOURCES AND RESOURCES

List of interviewees (all interviews conducted by Skype)

Mohd Nizam bin Omar, Training Manager, Penang Water Services Academy

Digby Davies, Case Study Consultant, GWOPA

Arie Istandar, Chief of Party, Waterlinks

Gerard Rundberg, Director External Affairs, World Waternet

Leo Nijland, Programme Manager International Cooperation, DUNEA

The paper has also benefited from a number of informal conversations with water operators and other experts during the BEWOP workshop in Barcelona on 25–26 November, 2013, and the 2nd Global WOPs Congress in Barcelona on 27–28 November, 2013.

Reference documents and websites

Alaerts, GJ & JM Kaspersma *Progress and challenges in knowledge and capacity development.* (2009) in Capacity Development for Improved Water Management Blokland, M. W., Alaerts, G. J. & Kaspersma, J. M. (eds). Taylor & Francis, London, UK

Asian Development Bank *Operations Manual*, Section C:4, issued 23 December 2013 available at http://www.adb.org/sites/default/files/OMC04.pdf

Blokland MW, GJ Alaerts, JM Kaspersma, & M Hare editors, Capacity Development for Improved Water Management (2010) UNESCO-IHE & UNW-DPC, CRC Press

Contra Costa Water District Action Plan and Results Report (2012), Belize Water Services and Contra Costa Water District: Water Operators Partnership Program CCWD & BWS internal document

Breeveld R, L Hermans, & S Veenstra Water operator partnerships and institutional capacity development for urban water supply (2013) Water Policy v15 Supplement 2, IWA Publishing 2013 available at http://www.iwaponline.com/wp/015S2/S2/

Caplan, K The Purist's Partnership: Debunking the Terminology of Partnerships (2003) BPD Water and Sanitation Practitioner Note Series available at

http://www.bpdws.org/bpd/web/d/doc_86.pdf?statsHandlerDone=1

Dunea Grant Application for Financial and Operational Performance Improvement programme for Mwanza Urban Water and Sewerage Authority (2011) Dunea internal document

Graas S, A Bos, C Figuéres, & T Adegoke *Partnerships in the Water and Sanitation Sector* (2007) IRC Thematic Overview Paper 18 available at

http://www.irc.nl/content/download/29565/306650/file/TOP18_Partner_07.pdf

Gunawardana I, K Leendertse & W Handoko Monitoring outcomes and impacts of capacity development in the water sector: a Cap-Net UNDP experience Water Policy v15 Supplement 2, IWA Publishing 2013 available at

http://www.iwaponline.com/wp/015S2/S2/

Global Water Operators' Partnerships Alliance Charter (undated) available at http://gwopa.org/index.php/resource-library/2925-global-water-operators-partnerships-alliance-charter

GWOPA Guiding Principles available at

http://gwopa.org/index.php/about-us-gwopa/charter/guiding-principles

GWOPA Strategy 2013 - 2017, available at

http://gwopa.org/index.php/resource-library/3536-gwopa-strategy-2013-2017

Water Operators Partnerships: Building WOPs for Sustainable Development in Water and Sanitation available at http://www.unhabitat.org/pmss/listItemDetails.aspx?publicationID=2851

Water Operators' Partnerships in Asia: Case Study 1 – Metro-Cebu Water District and City West Water, 2013

Water Operators' Partnerships in Asia: Case Study 2 – PDAM Tirtanadi and Indah Water Konsortium, 2012

Water Operators' Partnerships in Asia: Case Study 3 – Water Supply and Sewerage Authority of Ulaanbaatar and Vitens Evides International, 2012

Water Operators' Partnerships in Africa: Case Study 1 – VEI and FIPAG, 2013

Water Operators' Partnerships in Africa: Case Study 2 – Dunea MV and Mwanza Urban Water and Sewerage Authority, 2013

Water Operators' Partnerships in Africa: Case Study 3 – eThekwini Water and Sanitation, City of Durban (South Africa) – Bulawayo City Council (Zimbabwe) (2013) draft version

All case studies available at

http://gwopa.org/index.php/resources/search-results?order=featured&cat=90&query=all&jr_jrrepubdate=2012&jr_retypesofdocument=case-study

WOPs summary information data base, available at

http://gwopa.org/engage-with-us/wop-profiles/search-results_m587/query:all/cat:97/order:alpha

GWOPA & UNESCO-IHE Proposal for Cooperation In support of Water Operator Partnerships (June 2013 – June 2018), Project Document (2013) internal document

Hall D, E Lobina, V Corral, O Hoedeman, P Terhorst, M Pigeon, & S Kishimoto (2009) *Public-Public Partnerships (PUPS) in Water* Public Services Institutes Research Unit, University Of Greenwich, UK available at http://www.tni.org/sites/www.tni.org/files/download/pupinwater.pdf

Hollander, R Assessment of the effectiveness of short-term input in Mozambique, (2012), VEI internal report

infed (resource website of the WMCA George Williams College) page on Argyris theories of learning available at

http://infed.org/mobi/chris-argyris-theories-of-action-double-loop-learning-and-organizational-learning/signal-learning/signal-learning/signal-learning/signal-learning/signal-learning/signal-learning/signal-learning/signal-learning-sign

IWA & GWOPA/UN-HABITAT in coordination with VEI Water Operators Partnerships Building WOPs for Sustainable Development in Water and Sanitation (undated brochure)

Jabatan Pembangunan Kemahiran, Kementerian Sumber Manusia, (Department of Skills Development, Ministry of Human Resource) Malaysia National Occupational Skill Standard: Standard Practice & Standard Content For Water Treatment Plant Operator (undated)

Learning Network for Capacity Development (LenCD) Learning Package on Capacity Development (2011) available at www.lencd.org/learning

Lincklaen Arriëns, WT & U Wehn de Montalvo Exploring water leadership (2013) Water Policy v15 Supplement 2, IWA Publishing 2013 available at

http://www.iwaponline.com/wp/015S2/S2/

Pascual Sanz M, S Veenstra, U Wehn de Montalvo, R van Tulder and G Alaerts What counts as 'results' in capacity development partnerships between water operators? A multi-path approach toward accountability, adaptation and learning (2013) Water Policy v15 Supplement 2, IWA Publishing 2013 available at http://www.iwaponline.com/wp/015S2/S2/

Pascual Sanz, M, V Merme-Darrigrand, & K Schwartz Framework for Analyzing Water Operator Partnerships (draft November 2013) UNESCO-IHE

Patrón Coppel, G & K Schwartz Water operator partnerships as a model to achieve MDGs for water supply? Lessons from four cities in Mozambique (2011) Water SA Vol. 37 No. 4 available at http://www.ajol.info/index.php/wsa/article/viewFile/71453/60398

Pearson, J Training and Beyond: Seeking Better Practices for Capacity Development (2011) OECD Development Co-operation Working Papers, No. 1, OECD Publishing, available at

 $http://www.oecd-ilibrary.org/development/training-and-beyond-seeking-better-practices-for-capacity-development_5kgf1nsnj8tf-en; jsessionid=4ld21rkgpd5gq.delta$

Penang Water Services Academy – Skills Training Initiatives By Penang Water Services Academy (EXECUTIVE SUMMARY undated) PWSA internal document

UNESCO-IHE & GWOPA/UN-HABITAT, BEWOP Brochure (September 2013) available at http://www.gwopa.org/images/BEWOP_brochure_2013 lowres.pdf

UN-HABITAT *Training for Better Cities* (2012) available at http://www.unhabitat.org/pmss/listItemDetails.aspx?publicationID=3350

United Nations Secretary-General's Advisory Board on Water and Sanitation Hashimoto Action Plan: Compendium of Actions (2006) available at

http://www.unsgab.org/index.php?menu=197

Veenstra, S Annual Workplan 2013 (concept) for effective and efficient employment of experts from Vitens Evides International (2013) VEI internal document

Vincent, R & A Byrne Enhancing learning in development partnerships (2006) Development in Practice, 16:5, 385 – 399, available at

http://dx.doi.org/10.1080/09614520600792192

Wehn de Montalvo, U & G Alaerts Leadership in knowledge and capacity development in the water sector: a status review (2013) Water Policy v15 Supplement 2, IWA Publishing 2013 available at http://www.iwaponline.com/wp/015S2/S2/

Wikipedia section on *Organisational Learning* available at http://en.wikipedia.org/wiki/Organisational_learning

