



Capacity development in the Ocean Decade and beyond: Key questions about meanings, motivations, pathways, and measurements

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ABSTRACT

Capacity development is a major priority in the United Nations Decade of Ocean Science for Sustainable Development (the Decade). Persistent disparities in ocean science capacity illustrate the substantial challenges to achieving the Decade's stated goal of eradicating inequality. We argue that a new conversation about capacity development is essential for the success of the Decade and beyond. We question the meaning, motivations, pathways and measurement of capacity development at this critical juncture. While we do not propose a single answer to these context- and situation-specific questions, we do recognize that the lack of accepted, or even defined, approaches to capacity development, its initiation, leadership, desired outcomes, implementation, and evaluation is failing the global ocean community. Explicit focus and reflection on the power of discourses, definitions, positionality, and perspectives has the potential to greatly improve the experience and outcomes of capacity development programs. This Perspective seeks to stimulate reflection and action to seize the substantial opportunity presented by the Decade to facilitate capacity development solutions toward a more equitable world.

1. Introduction

Capacity development is recognised as a critical challenge in the United Nations Decade of Ocean Science for Sustainable Development (the Decade; UNESCO-IOC, 2021b) and in Sustainable Development Target 14.a (UNGA 2015). One definition of capacity development is “the process by which individuals and organisations obtain, strengthen,

and maintain the capabilities to set and achieve their own development objectives over time” (UNESCO-IOC 2021a). Just as the outcome of the Decade will be shaped by how, where, when, and by whom ocean science is used (Singh et al., 2021) – capacity-building outcomes will be determined by the motivations of those involved, and the power structures associated with capacity development mechanisms and measurements.

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Persistent gaps in the capacity to undertake and utilise ocean science worldwide (UNESCO-IOC 2017; UNESCO-IOC 2021a) illustrate the substantial challenge of achieving the Decade's goal of 'eradicating inequality' (UNESCO-IOC 2021b). Access to the human, institutional, technical and financial resources required to undertake ocean science remains dominated by actors and institutions located in high income countries (Partelow et al., 2020; Uku et al., 2020; Tolochko and Vadrot 2021; Amon, Rotjan et al. Accepted). For example, early-career scientists' involvement in international fora continues to be determined by country of origin, the majority of scientific literature remains behind expensive paywalls (Else 2018), and access to tertiary education in ocean science remains unequally distributed (UNESCO-IOC 2021a). Women and underrepresented groups continue to face barriers in access and longevity in ocean science professions (Black 2020; Ahmadi et al., 2021; Amon et al., 2022). Financing is generally project-based and short-term, often resulting in unsustainable outcomes once funding ends (National Research Council, 2008). These gaps cast doubt on the ability of international science cooperation, as currently practiced, to develop capacity in a meaningful, equitable, and lasting way.

Moreover, these gaps raise questions about the process and outcomes of capacity development. In some cases, capacity development may be carried out as a tick-box exercise, whereby meaningful development of skills and their future application is neglected. A growing body of literature has documented 'parachute' or 'colonial' ocean science, wherein foreign researchers fail to engage meaningfully with, and ensure benefits to, local people (de Vos 2020; Partelow et al., 2020; Haelewaters et al., 2021; Stefanoudis et al., 2021). The dominance of western scientific frameworks can also preclude a meaningful acknowledgement and inclusion of different epistemologies and distinct ways of knowing as part of capacity development (Fricker 1999; Vadrot 2014; Partelow et al., 2020). These characteristics limit the effectiveness of many initiatives promoted as capacity development and can maintain or even increase existing power differentials. At the same time, the lack of accountability measures and effectiveness metrics for capacity development programs (Kenny et al., 2010; Lempert 2015; Amon et al., 2022) hinder efforts to identify problematic issues or improve capacity development practices. It is necessary to acknowledge and address instances where initiatives labelled as "capacity development" have been inadequate or even exploitative, regardless of intention.

Here we argue that a new conversation about capacity development is essential for the success of the Decade and beyond. Recognising that capacity development is highly contextual, we pose four questions that warrant consideration at this critical juncture:

- (i) what is the meaning of capacity development in a given context?
- (ii) what are the motivations behind capacity development?
- (iii) what pathways and partnerships enable capacity development?
- (iv) how are the outcomes of capacity development measured?

Rather than attempt to definitively answer these context-specific questions, we aim to stimulate essential reflection and discussion on the meanings, motivations, pathways and measurements of capacity development among researchers, policymakers, funders and other stakeholders involved in the design, implementation and evaluation of capacity development activities in the Decade and beyond. Our perspective is informed by our experiences and draws from the rich history of governance literature on issues such as actor interaction (Weiler and Klöck 2021), narrative development (de Jong and Vijge 2021) and power dynamics (Wesselink et al., 2013; Bexell and Jönsson 2019; Vij et al., 2021).

2. What is the meaning of capacity development?

Ocean science in the Decade framework is recognised as having a broad scope, including but not limited to natural and social science, and local and Indigenous knowledge (UNESCO-IOC, 2021b). The Decade

framework for capacity development presents two broad aims (UNESCO-IOC 2021b). The first is to increase capacity overall, as illustrated by the Decade Objectives 1 and 3, which concern both 'more science' and 'more capacity to utilise science'. The second is to build capacity (as illustrated by Decade Objective 2), particularly in developing countries, to achieve equitable access to data, knowledge, technology and skills as highlighted by the Decade Outcome 6 and Challenge 9. According to the Implementation Plan for the Decade (UNESCO-IOC, 2021b), there should be focus on efforts related to: conducting science; influencing the design of science; participating in co-design efforts; understanding science; and using science to develop solutions for sustainable development (including evidence-based policymaking, management and innovation). As part of the Strategic Framework for capacity development under the Decade, expected results include development of: human resources; technology and infrastructure; institutions; policies; knowledge exchange; and sustained resources including funding (IOC 2015, UNESCO-IOC 2021b). Since this diversity of aims and outcomes leaves room for selective framing and differing definitions of capacity development, it is important to establish a common understanding of the meaning of capacity development in a given context such as the Decade.

The meaning of 'capacity building' or 'capacity development' is strongly influenced by norms, worldviews and context, and can result in many interpretations (Kenny et al., 2010). In some cases, the terms 'capacity development' and 'capacity building' are used interchangeably. In others cases, the terms are distinguished, such as by restricting use of the term 'capacity building' to initial stages of an initiative or building something new from the ground up (EPRS, 2017). In others still, the term 'capacity building' is used to describe processes and outcomes that would elsewhere be considered as 'capacity development' (UNDG 2017) i.e., a process or means to achieve an end goal, reach a specific outcome, meet needs, or address a particular capacity gap (Gustafsson et al., 2020; Hogendoorn et al., 2021). Some activities deliberately avoid the terms 'capacity development' or 'capacity building' as they can be seen to presuppose a 'donor-recipient' relationship, and may be viewed as patronising. Alternative terminology can include capacity strengthening, knowledge exchange, skills sharing or more simply, partnerships.

The definition and understanding of capacity development also influences outcomes. Absent or imprecise definitions could offer a benefit to all partners, by allowing flexibility for context-appropriate capacity development definitions and approaches. Yet there is also a risk that the terms could cause confusion, or be used or misused in ways that perpetuate inequities by providing credibility to certain actors, and privileging certain approaches, types of knowledge and ideologies over others (Kenny et al., 2010; Lempert 2015). This risk is heightened where "capacity building" and "capacity development" become 'buzzwords' limiting meaning, debate, and discussion, and contributing to the continuation of activities that may at best be ineffective or at worst damaging (Kenny et al., 2010; Sink et al., 2021., Amon et al., 2022).

Without purposeful management under the Decade, there is a risk of tokenism or assistencialism associated with capacity development, whereby initiatives maintain or deepen inequities (Roy, 2018) and perpetuate colonial approaches to science. Yet, as a channel for soft power (Nye 2016), capacity development could also be an avenue for the decolonisation of science. Routes for creating decolonised interventions can be planned across multiple dimensions, such as decolonising expertise through appreciation of non-Western knowledge, equitable literature access and team inclusivity (Trisos et al., 2021). Practical tools are emerging to progress equity and inclusivity in science partnerships, for example the One Ocean Hub established a detailed Code of Practice to ensure balanced partnerships between Western and non-Western institutes.

The Decade framework for capacity development should facilitate a robust interrogation of these term(s), and how they apply to activities under the Decade. The debate should be informed by current discourses, including: the evolution of sustainable development narratives from

aid/donation to partnerships (de Jong and Vijge 2021); the portrayal of benefit sharing as a way of increasing social responsibility (Wynberg and Hauck 2014); the discussions on marine technology transfer shifting from bilateral hardware donations to multilateral partnerships (Harden-Davies and Snelgrove 2020; Polejack and Coelho 2021); and the evolving role of traditional and local knowledge in ocean governance (Mulalap et al., 2020). To build common understanding, capacity development programs under the Decade should provide co-produced, context-specific definitions of how their program will collaborate with different groups or peoples to meet identified needs, and which relevant and suitable approaches underpin such commitments. Further lessons may be drawn from experiences in tackling power dynamics in policy (Vij et al., 2021) and science (Gustafsson et al., 2020), especially ocean science (Uku et al., 2020).

3. What are the motivations to develop capacity?

As a diverse group of actors could be involved in capacity-development, it is necessary to identify and acknowledge the potential range of motivations surrounding a given context. Ocean scientists themselves have been called upon to shoulder responsibility for implementing the provisions of the 1982 United Nations Convention on the Law of the Sea (UNCLOS) relating to capacity building and technology transfer (Uku et al., 2020). In addition to ocean scientists, States, intergovernmental organisations, non-governmental organisations, and the private sector are also envisaged to have roles in capacity development in the Decade.

Different partners in a capacity-development initiative will likely have different levels of power over agenda setting. In the South Pacific, for example, the issue of science, technology transfer and capacity building (under SDG 14a) is the second most common SDG14 target addressed by ODA supported projects (behind SDG 14.2 on sustainable management and protection) (Hills et al., 2019). However, “priorities are clearly different” between countries in the region and international representatives delivering SDG14 in the Asia-Pacific region (UN ESCAP 2018), suggesting that capacity development is predominantly donor-led, rather than country-led.

Those with more financial resources to undertake ocean science also demonstrate greater power to set agendas (Partelow et al., 2020), including for capacity development. In South Africa, the equal funding of international research partnerships has been identified as a key enabler for capacity development (Sink et al., 2021). National governments currently fund the majority of ocean science and the role of foundations in funding ocean science is increasing (UNESCO-IOC, 2021a). Governments and foundations have their individual motives and priorities for research funding, giving them greater power in setting the ocean research agenda in what continues to be a relatively modest research budget compared to other research areas (UNESCO-IOC, 2021a). It is therefore important to consider the various interests of all actors involved in capacity development, identify ways to redefine or reverse imbalances in power, and cultivate the will to do so.

There are a range of motivations guided by global policy targets and priorities, institutional agendas, and the interests and worldviews of various actors including governments, industry and non-governmental organisations. Capacity building can be seen as a moral responsibility and an altruistic act (Weiler and Klöck 2021). It can also be a requirement, for example the commitments relating to capacity building in ocean science for sustainable development, including under UNCLOS Parts XIII and XIV (IOC 2005; Harden-Davies and Snelgrove 2020). More pragmatically, capacity building can also be seen as instrumental or mission-critical - without sufficient, sustained capacity, individual and institutional potential cannot be realised, and local, regional, and international goals for marine conservation and sustainable development cannot be met (Gill et al., 2017; Bax et al., 2018; Miloslavich et al., 2019). Alternatively, capacity development may be an unintentional, spill-over effect from a partnership. In addition to those implementing

capacity development, it is also crucial to understand the motivations of the individuals and institutions facing capacity constraints.

There are likely to be multiple factors that underpin capacity development needs, for example, governments might seek to further ocean-based blue economies, and scientists may seek skills, equipment or international collaboration to increase the availability of opportunities at home or abroad. In small island states for example, international science partnerships are often crucial to address capacity constraints relating to expertise, technology, science equipment and infrastructure, and funding (Harden-Davies et al., 2020, 2022). However, there are continuing challenges to retaining and sustaining capacity locally in the long-term, and ‘brain-drain’ remains a problem whereby ocean scientists seek careers abroad, unable to find employment or use their skills locally (Harden-Davies et al., 2020, 2022). Ensuring that local leaders can access the funds, skills and infrastructure needed to sustain capacity in the long-term remains a key priority requiring continued effort over many years. Yet such voices and needs are often neglected in capacity development decision-making processes.

Capacity development can also be self-serving, buying political influence or credibility, while failing to reflect the mutually-beneficial nature of partnerships or the knowledge, including traditional knowledge, that already exists. In such instances capacity development can be reduced to tokenistic activities tacked-on to programs without leading to lasting changes that improve the wellbeing of those most in need. Capacity development may also attempt to impose global solutions without regard to existing local context, innovations and practices. In such circumstances, capacity development programs may perpetuate power dynamics at a global level, and further inequitable outcomes at local levels. Actors may ‘sell’ programs and projects as ‘capacity building’ without any means of accountability or meaningful performance evaluation; actors with good intentions may create unintended negative side-effects; and actors with an opportunity to ‘do good’ may be ill-equipped to deliver. Motivations may not always be explicitly stated, so those participating in capacity development should think critically about their own interests as well as those of all parties involved.

4. What are the pathways to develop capacity?

The Decade capacity-development framework presents several pathways for instigating and implementing capacity development. For example, it strongly encourages the establishment of country- and needs-specific partnerships; indicates an intention to address resource needs for people from developing countries; and aims to increase the number of capacity development efforts while enhancing coordination and focus (UNESCO-IOC 2021b). It is important to understand the factors that determine the success or failure of initiatives. Capacity development is not simply knowledge transfer, but is framed by social and political contexts (OECD, 2008). There are several possible pathways for capacity development that merit exploration.

In some cases, capacity development may be the primary intended outcome of a program or partnership. For example, several organisations operating in the ocean-science space have capacity development as a core business, and for many others capacity development is a key element of their work. In other cases, capacity development may be semi-intentional, for example as a ‘piggy-back’ on a broader partnership. Some partnerships, for example monitoring ocean acidification globally, may not be possible unless the human capacity and technology available to all partners is raised, and thus capacity development is central for the success of the partnership as a whole. In other cases, capacity development could be used as leverage for a parallel goal, or even as a cover for a hidden agenda (Lempert 2015). An example of this may be an industry or government partner offering capacity development in exchange for access to resources or political capital, or a foreign research organisation offering capacity building in exchange for access to local resources, subjects, or environments of interest. Alternatively, capacity development may be unintentional – as a serendipitous spill-over effect from a

partnership. An international science partnership formed for entirely pragmatic reasons might build capacity as a side-effect of the partnership. Examples include partnerships that focus on more technology-driven progress, such as machine learning and artificial intelligence, that also result in the support of foundational knowledge such as taxonomy and species identification skills.

Understanding why capacity-development programs succeed, or fail, in achieving positive outcomes is critical to guide Decade programs, and crucial for developing implementation mechanisms for capacity development that provide the best fit for a specific partnership or program. Recognised challenges in reaching capacity development goals during the Decade include fragmentation, lack of coordination, and insufficient funding (UNESCO-IOC 2021b). Yet there are many more challenges: for example, investments may not go to where they are needed most; partnerships may not deliver the equitable playing field envisaged; those most in-need may be marginalised by others who dominate agenda setting (Partelow et al., 2020); and participation may place a burden on individuals who are already overworked.

Additionally, the steady proliferation of more sophisticated and technologically-demanding scientific and technical methods presents further challenges to meaningful and timely technology transfer and capacity development. It is critical that local and regional contexts guide the design of capacity-development. For example, South Africa's efforts to identify barriers and enabling factors in deep sea research and management capacity were established to guide future capacity development strategies (Sink et al., 2021).

Similarly, it is important to ensure that capacity development pathways and partnerships do not place singular value on western science, neglecting other forms of knowledge. This approach limits the potential to find innovative solutions to complex problems, and sustains the belief that some States lack understanding of their natural environments. For example, Indigenous Peoples and local communities have, through millennia, developed sustainable systems of marine resource management that recognize the cultural traditions of interconnectedness between people and the marine ecosystem, and are based on a dynamic, long-term knowledge of the environment (Ostrom, 1990). Such knowledge, innovations and practices greatly expand the available approaches for ocean science, conservation and management, and the solutions available for ocean governance (Vierros et al., 2020; Wehi et al., 2021). They also offer a rich potential for two-way capacity building.

In understanding why capacity development initiatives succeed or fail, proponents of capacity development in the Decade should identify and address the root causes of disempowerment and inequity (Partelow et al., 2020; Turnhout et al., 2020; Tolochko and Vadrot 2021) and identify solutions (Sink et al., 2021). Measures to promote equitable partnerships should guide capacity development, such as: joint research agendas (Partelow et al., 2020), co-developed programs (Woodall et al., 2021), aligning priorities, building long-term relationships, and enhancing local capacity (Hind et al., 2015; Amon, Rotjan et al. Accepted). Establishing partnership principles such as codes of practice to frame partnerships in inclusive, fair and equitable ways (e.g. the One Ocean Hub Code of Practice cited in Section 2 above) helps ensure that programs meet self-determined needs of relevant parties. However, such measures require sufficient time and resources to build and maintain relationships and ensure compliance. Furthermore, enabling environments, whereby people have access to required institutional and financial capacity and life-long learning, is crucial to sustain and retain human and technological capacity in-country in the long-term (UNDG 2017; Sink et al., 2021.). The role of professional institutes with progressive career pathways and recognised professional status, such as charterships, have the potential to enhance and direct professional standards and continue professional development.

5. How are the outcomes of capacity development measured?

The need to measure advances in ocean-science capacity is widely

recognised as an essential part of the monitoring and evaluation process of the Decade, and the Global Ocean Science Report is identified as a tool to track progress (UNESCO-IOC, 2021a). Yet measuring capacity, and assessing the outcomes of capacity development initiatives, is challenging; capacity development is often reported as a delivered activity rather than an outcome.

Firstly, there are substantial challenges to understanding capacities (at individual, institutional, national and regional scales) to conduct and use ocean science. This challenge is illustrated by the limited national response rates to the Global Ocean Science Report (UNESCO-IOC, 2017; 2020). This demonstrates shortfalls in our knowledge of baseline capacity, as well as issues of limited engagement, whether from limited human capacity, low stakeholder buy-in, or challenges in reaching the appropriate information holders. Enhanced monitoring of capacity and improved understanding of key stakeholder engagement should be regarded as capacity development priorities for the Decade.

Secondly, the lack of effective, transferable, and repeatable monitoring standards for most capacity development programs adds challenges to their evaluation. Non-existent, incomplete, inappropriate, or inaccurate reporting metrics can perpetuate inequities by favouring the adoption of reporting requirements by 'providers' instead of verifying the long-term benefits to 'recipients'. Capacity development metrics often relate to the number of outputs or activities completed by 'providers', yet measurements of the lasting outcomes and benefits of such activities are less common. Quantitative metrics, such as the number of people attending a workshop, do not fully capture capacity-building progress or effectiveness. For example, a training course might have no lasting positive impact if the person trained has no access to tools, institutional support, funding, collaborators, or mentors to support continual professional development. Worse, capacity building might have negative outcomes, institutionally or personally; for example if an activity detracts resources and attention where capacity is already low, if a person experiences harassment or discrimination such as during research cruises (Amon et al., 2022), or if locally trained people cannot remain in their country because the employment opportunities are overseas.

Robust metrics for capacity development outcomes at multiple scales (individual, institutional and national) are therefore important to ensure accountability and leave no room for abuses of power or misuse of resources. As part of evaluation, it is important to solicit input from those involved in capacity development programs to ensure that there is genuine and enduring benefit (Lempert, 2015). It is also important to understand that all partners, regardless of their pre-existing capacity, can benefit from capacity development partnerships (Sink et al., 2021), and outcome metrics should seek to measure such two-way benefits.

To address these challenges, the assessment of capacity building in the Decade should move beyond activity-based reporting and towards evaluation of lasting outcomes. A periodic review of the capacity development framework for the Decade could help to ensure it is inclusive of the diverse and evolving needs, and desired outcomes, of involved individuals, organisations, and States. The design and review of this framework should include the critical and diverse voices of those whose capacity is intended to be developed, through co-design or other approaches, and be updated regularly as appropriate. Such an assessment could be made against self-identified needs prior to the commencement of the capacity-development initiative, though in some countries, support may be required to assist in the identification of needs as well as mechanisms to request such support.

In addition, perspectives from earth system governance relating to understanding actors' interactions (Partelow et al., 2020; Hogendoorn et al., 2021) and the operation of science cooperation (Turnhout et al., 2020) would contribute to an understanding of why capacity development initiatives succeed or fail to achieve lasting outcomes. This literature can inform more nuanced outcome-focused discussions in the Decade, including issues of governance capacity (Koop et al., 2017), funding capacity (Glass and Newig 2019), reflexive capacity to respond

to new information, and discursive capacity to influence power dynamics in policy-making processes (Vij et al., 2021). Some surprises in what emerges as the most effective component of Decade actions should be expected. Finally, evaluations should reflect explicit and measurable goals of the Decade. Such a system could contribute to generating systematic frameworks and strategies to measure progress towards achieving Agenda 2030 (UNESCO-IOC 2021a).

6. Concluding remarks

In this Perspective, we have reflected on four questions that warrant careful consideration in the Decade and beyond: 1) What is the meaning of capacity development in this context?; 2) What are the motivations behind capacity development?; 3) What are the pathways for capacity development?; and 4) How can the outcomes of capacity development be measured? We propose centralising the following elements in capacity development discussions under the Decade:

- i) Ensure a shared understanding of the meaning of capacity development.

Capacity development may refer to individual, institutional, national, regional or even global scales, and range from, for example, a training course to a hub of research institutions. Recognising the broad and diverse range of possible interpretations of capacity development, it will be critical to avoid overly narrow conceptualisations of capacity development at the outset of conversations. Rather than seeking a universal definition of capacity development, it is likely more appropriate to encourage proponents of programs and partnerships to critically reflect on the needs for, and meaning of, capacity development within their specific context, and clearly and collaboratively define the desired outcomes to meet self-determined needs.

- ii) Design opportunities to reflect on key factors influencing capacity development outcomes.

The advantages and limitations of capacity development may only be fully understood through the lived experiences of the people affected and the stories that they tell. Their voices and input should be solicited so that their experiences can guide capacity development programs. The creation of explicit spaces where stakeholders, scientists, policy-makers, and those involved in capacity development programs can speak openly about their experiences may help distil good practices and synthesise recommendations from diverse contexts, to improve capacity development initiatives under the Decade. Such reflection could be facilitated by training courses in understanding and addressing individual positionality and reflexivity or inter- and trans-disciplinary research that investigates capacity development programs and develops theories of change. Closer scrutiny of barriers, enabling factors, and benefits from capacity-building programs could help to address problems such as privileging certain types of knowledge, or creating path dependencies where people are locked-in to particular partners or approaches. Co-developing partnership principles, or codes of practice, may help clarify expectations and means effective collaboration.

- iii) Support for people and partnerships.

People and the partnerships that they build are at the core of capacity development. Whether through mentoring connections to deepen the impacts of training, or networking to facilitate knowledge sharing – people are key. Yet building and maintaining relationships takes time and requires resources, particularly to enable marginalised groups to be in the ‘driving seat’ of initiating partnerships and setting agendas for capacity development initiatives. For example, institutions and countries facing severe capacity constraints require financial support to attract, retain and sustain local talent in the long-term. There will be a

role for all actors involved in the Decade to promote equitable partnerships, including research organisations, funding agencies and donors, governments, non-governmental organisations and intergovernmental organisations. For example, there could be a role for the IOC-UNESCO Group of Experts on Capacity Building, Decade National and Regional Committees, Communities of Practice, and Expert Groups, other organisations to facilitate dialogue between policy-makers, researchers, donors and those affected by capacity development programs.

- iv) Ensure the outcomes of capacity development are central to monitoring.

Poorly-defined goals and vague aspirations will ultimately undermine efforts to create an equitable ocean and complicate the development, implementation, and evaluation of policies to support meaningful capacity development. Proponents of capacity development should take care not to reinforce out-dated approaches. This could be achieved by incentivising the quality and longevity of outcomes, including two-way outcomes, rather than the quantity of standalone initiatives. Specifically, earth system governance perspectives that provide methodological frameworks for assessing capacity could be useful in this regard (Koop et al., 2017; Hogendoorn et al., 2021).

Capacity development is a major stated goal of the Decade and the UN Sustainable Development Goals, not to mention their broader purpose of eradicating inequality. Yet capacity development projects may maintain, or in some cases deepen, the very divide they aim to eliminate. The challenges to effective capacity development in ocean science are substantial, but explicit focus and reflection on the power of discourses, definitions, positionality, and perspectives has the potential to greatly improve the experience and outcomes of capacity development programs. It is only through critical reflection and open discussion on the meanings, motivations, pathways and measurements of capacity development that meaningful progress can be made. The Decade is not the first initiative to face the challenge of implementing capacity development. Our hope is that the Decade can seize its substantial opportunity to facilitate capacity development solutions toward a more equitable world.

CRedit authorship contribution statement

Harriet Harden-Davies: Conceptualization, Writing – original draft, Writing – review & editing. **Diva J. Amon:** Conceptualization, Writing – review & editing. **Marjo Vierros:** Conceptualization, Writing – review & editing. **Nicholas J. Bax:** Writing – review & editing. **Quentin Hanich:** Writing – review & editing. **Jeremy M. Hills:** Writing – review & editing. **Maila Guilhon:** Writing – review & editing. **Kirsty A. McQuaid:** Writing – review & editing. **Essam Mohammed:** Writing – review & editing. **Angelique Pouponneau:** Writing – review & editing. **Katherine L. Seto:** Writing – review & editing. **Kerry Sink:** Writing – review & editing. **Sheena Talma:** Writing – review & editing. **Lucy Woodall:** Writing – review & editing.

Declaration of competing interest

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