**A Response to the Interim Report of the Productivity Commission**

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The primary intention of this submission is to provide feedback on:

* the “ effectiveness and appropriateness” of some of the National Policy Initiatives” (NPIs) included in the National Schools Reform Agreement (NSRA) made between Australian, State and Territory Governments in July 2019 and
* the breadth and appropriateness of aspects of the National Measurement Framework for Schooling(NMFS) in Australia as reflected in the Schedule of key performance measures 2020–2023.

This submission is written cognizant of the Commission’s desire to focus *“on factors that influence student outcomes that are amenable to intergovernmental collaboration”* and deliverable, so as to inform recommendations in the design of the next intergovernmental school reform agreement. (Productivity Commission, 2022,p vi).

A secondary intention of this submission is to provide an argument for a process that will enable teachers and educators to contribute more effectively to the formulation of feedback on the unintended negative consequences of the NSRA the NPIs and the NMFS. These negative consequences include observations from the *Review of the National School Reform Agreement Interim Report Overview* – The Review for future reference – (Productivity Commission 2022 p,28) that “there is a poor connection between policy making and implementation in the classroom”. Further, the observed deteriorating morale of teachers as evidenced in surveys such as the AITSL( 2021) is presented as an additional negative consequence.

The argument is built on the premise that there has been insufficient attention to framing the development of *education reform* as a ***wicked problem*** (WP) in the sense first proposed by Rittel (1973). Reframing education reform as a *wicked problem* will alert planners and public policy makers to methodologies that researchers have shown to be more appropriate in harnessing them and avoiding some of their negative consequences.

The key recommendation that follows is that policy makers should engage more strongly with key stakeholders and ‘build in’ more robust and flexible review processes that elevate a ‘teachers voice’ in particular. Public education policy dominated by the powerful instruments and authorities that have *tamed* and *measured* education reform and continue to use outdated linear processes of problem solving, are seen as instrumental in the ineffectiveness of reform measures in improving the productivity of our society’s education investment.

**An Interim Repost Challenge: The NSRA needs to close the distance between national policy making and classroom practice**

The stated objective of the NSRA is to realise the provision of high-quality equitable education for all Australian students. Key outcomes sought by NSRA are:

• Improved academic achievement for all students, including priority equity cohorts

• All students are engaged in their schooling and

• gain the skills they need to transition to further study and/or work and life success ( ACARA 2022, p3.).

The author notes optimistically that the Interim report recognises that a “key challenge in lifting school performance is that policy deliberations…. can be far removed from the daily realities of classrooms, teachers, and students ” and that future intergovernmental agreements will need to “close the distance between national policy making and classroom practice.” (Productivity Commission, 2022,p 22).

**Reframing education as a wicked problem in exploring the distance between policy and the classroom practice**

This submission presents a view that aspects of both the National Policy initiatives ( Productivity Commission 2022, p5) described as “enablers” and the  **measurement framework (ACARA 2020)** are problematic because their operational parameters do not have good access to teacher *knowlege*. Further, it is argued that this arises from a failure, from a policy perspective, to recognise that the problem of improving education outcomes is a **wicked problem** (Rittel 1973).

Rittel ( 1973,pp.161-167) identifies 10 characteristics of a wicked problem. Three aspects of a wicked problem used by others for easier application in the context of the governance processes of  *multi-stakeholder partnerships* ( Dentoni, D., Bitzer, V., & Schouten, G. 2018, p338), help highlight the source of policy shortcomings, in relation to NPIs and the National Measurement Framework for Schooling(NMFS) . These are:

* Knowledge uncertainty
* Value conflict and
* Dynamic complexity

For the purposes of this submission the following clarification of these terms is presented.

*Knowledge uncertainty* relates to the fact that WPs are so entangled in other problems that they have a set of ill-defined sets of causes and effects. Consequently, the knowledge necessary to understand the complexity of the problems and the interrelationships between variables is uncertain. This knowledge is also broadly distributed amongst stakeholders.

*Value conflict* recognises that multiple stakeholders associated with a WP have different assumptions on the causes of the problem and often begin with different and almost irreconcilable frameworks.

*Dynamic complexity* arises because of the interrelationship between variables in the social system in which the problem is embedded. Often actions taken lead to unplanned and unexpected consequences. These consequences can make the problem worse and lead to less social cohesion as outcomes are judged by stakeholders based on their own group interests , values sets or ideology ( Dentoni, D., Bitzer, V., & Schouten, G. (2018), p 338)

Many researchers of social policy exploring appropriate ways to harness/ manage WPs, have emphasised the importance of a networks and systems approach. They also warn that uncoordinated or fragmented action in a public governance context in a traditional way will be ineffective ( Conklin, 2001, p.17). This was realised early by Rittel, quoted by Conklin (2001,p19)

“*We are now sensitized to the waves of repercussions generated by a problem-solving decision directed to any one node in the network, and we are no longer surprised to find it* *inducing problems of greater severity at some other node.”*

The Alice Springs( Mparntwe) Education Declaration (Department of Education, Skills, and Employment. 2021. ) outlines an admirable vision for our education system with clear goals and eleven commitments to action. This document also demonstrates cognizance that a successful education system is dependent on engagement of many stakeholders and co-ordinated action across many nodes.

However, what seems missing in the current review of the NSRA is the recognition of the *wicked*  nature of the problem of school reform. Perhaps the most significant shortcoming is that NPIs have failed to adequately engage teachers as stakeholders in developing the *knowledge* base critical to understanding both the problem and the prioritisation of responses that could improve student outcomes.

WPs also require policy settings to be applied iteratively through ongoing and high-quality review processes to support them. Many of the *draft findings* of the Interim report, relate to the domain( nodes) of teacher influence and yet, teachers have been inadequately engaged in developing policy initiatives, metrics for feedback or the iterative review processes employed.

While feedback is invited, as in this opportunity to inform the PC, it is argued that teachers are disempowered by processes that weight more heavily the feedback of the authorities and institutions that create and implement public policy. Examples of authorities and institutions include education departments and instruments such the *Australian Curriculum, Assessment and Reporting Authority (ACARA) and* the Australian Education Research Organisation (AERO).

Government departments and authorities are indispensable in the formation and activation of good education policy. However, when they act without appropriate attention to the *wickedness* of the reform they address, appropriate stakeholder engagement in policy development and review can be easily overlooked.

Teachers have an important role in managing the *wickedness* of education reform. They stand at the interface between policy and implementation. They have an important *knowledge* base critical to understanding the education system. Whilst current policy and implementation does not completely ignore teacher perspectives e.g., AITSL (2021) they need more *unmediated* and *weighted* opportunities to engage in policy initiatives and reviews as valued stakeholders.

**The teacher:**

In 1987, the *Harvard Review* published an important seminal article on teaching reform, by Lee Schulman (1987). In this, he articulated an understanding of the knowledge base for teaching and the implications of this teaching knowledge for teaching policy and educational reform. The validity of this understanding remains.

Schulman(1987) identified what he considered to be seven key domains of effective teaching practice. These somewhat abbreviated here were:

* content knowledge(CK)
* general pedagogical knowledge (GPK)
* curriculum knowledge( curriculum)
* pedagogical content knowledge( PCK)
* knowledge of learners
* knowledge of educational contexts
* knowledge of educational ends, purposes and values.

***Draft finding 2.2*** of the *Review of the National School Reform Agreement Interim Report Overview* – The Review for future refence – (Productivity Commission 2022 p,28) notes, “there is a poor connection between policy making and implementation in the classroom “. At the critical juncture between policy and the classroom lies the teacher. ***Draft finding 5.1 notes;*** ‘*improving the effectiveness of teaching would generate sizable lifetime benefits for students.’*

If Schulman’s( 1987) seven domains are accepted, then clearly effective teaching relies on competency across all these domains. ***Draft finding 2.2*** of the Review also notes that, ‘*Relying too much on NPIs that are a single solution to common issues has delayed reform outcomes.’.*

This *single solution* response is evident in the NPI to develop ‘*a new national institution to generate and communicate evidence-based advice on best practice to teachers, schools, and policy makers.’*

The Review(Productivity Commission, 2022 p6**)** notes that the NPI to develop an **evidence institute -** now identified as the Australian Educational research Organisation( AERO) - has been realised.

AEROstates that its vision is:

“ …for Australia to achieve excellence and equity in educational outcomes for all children and young people through effective use of evidence.”

It continues.

“ In support of this vision, we:

* generate high-quality evidence
* present high-quality evidence that is relevant and accessible
* encourage adoption and effective implementation of evidence in practice and policy.”

( The Australian Education Research Organisation, 2022)

Evidence in any social research context will be contested in part because of the diverse frameworks of stakeholders. Schulman (1987) highlights the issue of according legitimacy to classroom practices because they are "confirmed by research." He comments “While the researchers understood the findings to be simplified and incomplete, the policy community accepted them as sufficient for the definitions of standards.”.

**AERO as an example of policy initiatives failing to understand the teacher role**

If research relating to just two domains of teacher practice are considered , say GPK and PCK we already see evidence of a highly contested space. This is played out in current education debate around ‘ explicit teaching’ vs ‘inquiry approaches’ see (<https://www.smh.com.au/education/the-truth-about-inquiry-based-learning-20211012-p58z8v.html> ) . If AERO were to downplay the contested nature of research outcomes and the nuanced responses required by teachers in application of research to the classroom, it will ultimately provide poor advice. Additionally, if AERO were to operate from an ideological perspective because of its own policy directions set by a management representing a narrow set of stakeholders its function will be further comprised.

There is evidence that this shortcoming is already being realised. The current senior management of AERO as displayed on their web page (<https://www.edresearch.edu.au/about-us/meet-our-team>) does not seem to reflect significant investment in teacher/ practitioner perspectives or pedagogical expertise. The AERO resource collection has a recent article titled ‘ “But that would never work here” – does context matter more than evidence?’ In the research article attributed to Karen Gonsalkorale (2022) it concludes:

*“These findings show that formative assessment, mastery learning, and explicit instruction are likely to work in a variety of classrooms. This means they are good practices to use to ensure all students are learning.”*

Without attribution or critique of the “meta- studies ” on which this conclusion resides and the lack of caveats, this advice at best, could be considered a sound general pedagogical practice applied as part of a “toolkit” of pedagogical actions available to teachers. However, this is not the context of the advice.

What the NPI activated in the formation of AERO ignores, is that there are already well-established networks of professional subject -based teaching associations that provide well- nuanced advice around effective evidence -based teaching practice. These associations serve teachers well in providing advice around CK , PCK, curriculum knowledge, engaging students, as well as providing broader forums for discussion that promote real professional engagement for teachers, with more ‘checks and balances ‘ from ideological interference. They provide teachers with unmediated advice that recognises and supports their agency in implementation. More importantly because they are associations of teachers, they understand the interplay between the domains of teacher knowledge and skills identified by Shulman( ibid).

This NPI also ignores strong evidence that effective professional learning (PL) for teachers requires more than exposure to ideas and pedagogies. Short, J., & Hirsh, S. (2020), emphasise the importance of supporting teachers with curriculum -based professional learning focussed on instructional materials based on specific pedagogical approaches. These involve active learning sessions that include practicing instruction, participating in lesson as teachers, as well as coaching and feedback opportunities during teacher regular workdays. It is also noted that the National School Improvement Tool, *Domain* 8 *Effective pedagogical practices* (Masters 2012. P. 16*)*  identifies a similar approach.

Whilst the formation of AERO does not preclude this type of curriculum- based professional learning, the broader NPI does not support it through any recommendations for this approach. Subject – based teacher professional organisations such as the Mathematics Association of Victoria ( MAV) already support these types of PL activities. This is the kind of professional learning is effective, but teachers are not provided time to experience it and schools are not resourced to provide it.

It is strongly recommended for the next NSRA that the NPIs are more broadly developed through more robust engagement with teacher, tertiary teacher educators and researchers to help ameliorate the gap between policy and classroom implementation. Understanding how teachers respond to the demands of their profession and engaging their *knowledge* is critical to the implementation of policy. How this might be effected is discussed later.

Another critical element of the education reform and review processes currently in place is the National Measurement Framework for Schooling(NMFS).

**National Measurement Framework for Schooling**

Evaluation of the implementation of the current eight NPIs uses a nationally designed *“one size fits all measurement framework”* . The metrics gathered by these processes are further mediated by state and local education authorities who, operating under regulatory requirements, remain relatively passive in their critiques of the framework.

It is beyond the scope of this submission to offer comprehensive feedback on the NMFS. However, an examination of just a few of metrics associated with the NMFS again illustrates how unintended consequences of policy can undermine reform goals. These consequences are visible at the interface of policy and classroom practice. When left to the instruments of policy such as ACARA this *knowledge*  can be largely overlooked with a resulting ‘more of the same’. These government education authorities need more direct access to this *knowledge* largely held by teachers, without mediation by other bodies such as *employing authorities* ( e.g. Catholic Education and State Education Departments), that are likely to ameliorate feedback to maintain their influence in government decision processes. “Rocking the boat’ rarely serves a stakeholder well. It may also explain why teachers feedback is often held at ‘arm’s length’.

ACARA’s  National Assessment Program for numeracy and literacy (NAPLAN) as a metric for measuring student outcomes provides a ‘case in point’. Appropriate review process of initiatives responding to *wicked problems* require a focus on the interdependence of system components and their potential to interact negatively. This requires significant stakeholder engagement. In this context it is important to ask important questions of stakeholders, particularly teachers, to evoke clearer understandings of these interplays. Some question we might ask are;

* How does NAPLAN reporting skew the national debate on education reform in unhelpful ways?
* Do we have a shared understanding of the purpose of NAPLAN?
* In what ways can NAPLAN testing interact negatively with sound curriculum delivery?
* How does the NMFS more generally skew discourse and adoption of better NPIs?

It is important to investigate the interplay between system actions. As noted through reference to Conklin (2001,p19) earlier, too much attention at one node in the complex system underpinning a WP will induce *‘problems of greater severity at some other node.’*

One vector for this negative interplay arises because teachers’ and local education authorities have reduced capacity to respond in meaningful ways to the more salient local ‘problems’ they recognise ( e.g., student engagement, development of teacher pedagogies, bullying, student behaviour , parent engagement). This is particularly the case when public discourse is so distracted by NAPLAN or another metrics. This ‘distraction’ and lack of a *systems approach* is also evident in the NSRA Review ( Productivity Commission 2022, p29.) when it notes ‘85 per cent of… underperforming .. ‘students do not belong to any of the priority equity cohorts identified in the National School Reform Agreement.’

**Recommendations moving forward**

It is not surprising that 58% of teachers who are considering leaving the workforce in NSW cite both *“demands of professional regulation”* and *“changes imposed on schools from outside”* as their underpinning reasons ( AITSL 2021 p 56). Teachers recognise that in a social enterprise such as education, relationships, work conditions and agency are more critical variables in determining education outcomes for students.

The current problem identification, policy initiative and measurement framework paradigm embraced by the NSRA seems unable to embrace this critical space of *problem wickedness* . It also fails to recognise that there are many “soft”, difficult to measure *interdependent variables* that educators recognise as critical to the reform agenda. In many ways the *etic* perspective of the NSRA lies in contrast to the more *emic* perspective valued by teachers. In doing so the NSRA has potentially limited its analysis of the education system it seeks to reform and been too focussed on *nodes,* that through interaction with ignored system components, has been less effective than it would otherwise be.

**A New Paradigm:**

The etic vs emic approaches to investigating or responding to the question “ Is **our reform** working?” is just one of the problems that plagues traditional decision-making processes that ignore problem *wickedness* . Ritchey, T. (2011 p 24) comments

*“Clearly, if your aim is not just to* ***study and describe*** *a social system (a population, an organisation or an institution), but to do something with it – i.e. to intervene, to change, to develop – then the*

***emi****c account is not simply a complementary explanatory. It becomes an all-important context for understanding what is actually going on. More correctly, it is the interaction between the* ***etic***

*(objective) and the* ***emic*** *(subjective) – as fully equal and efficient causal contexts – that drives the development of human social systems in an open-ended manner.”*

Developing policy initiatives to improve education outcomes for students while attending to outcomes for productivity analysis has all the hallmarks of a *wicked problem ( WP).* Rittel’s (1973) seminal work described in in his paper *Dilemmas in a General Theory of planning*has resulted in many new approaches for developing “better” public policy. Better social policy and planning is generally understood under this WP paradigm to require more significant stakeholder engagement in an education process for policy makers that enables more interaction with *problem uncertainty* but better analysis. In doing so policy makers are less likely to prematurely “tame “ the problem and consequently use “simplified metrics” to measure progress towards a “tame” solution that has little relationship to the underlying problem. More frequent iterative processes of evaluation and response are also suggested by WP approaches ( Conklin, 2001. P. 13)

Emmanuel Macron's **citizen assembly -***France’s 2020 Citizens Convention for Climate* might provide a useful model for future consideration for a NSRA that includes more direct stakeholder engagement alongside government ministers. A similar **teacher assembly** or ***mini public*** properly convened and led by a team of high -profile independent team of facilitators with some divergence in perspectives could provide the type of unmediated feedback envisaged in this submission. Its purpose and benefits would include:

* Better understanding of the reform agenda by education authorities especially in regard to impact of present policies on student outcomes
* New directions for authority reforms free of ‘self-serving’ goals
* Amelioration of teacher’s perceived lack of agency in education reform identifies in AITSL( 2021)
* A shift in public discourse around education reform
* Greater impact of policy on student outcomes

**Conclusion**

In summary this submission has presented the following key ideas.

* Education reform is a ***wicked problem*** and requires application of appropriate methodologies
* The NSRA, and current NPIs and NMFS are contributing to identified challenges in the *Review of the* *National School Reform Agreement*, Interim Report ( Productivity Commission, 2022)
* Greater teacher engagement in the process of developing the next NSRA through unmediated feedback is suggested. This would support better understanding of the education agenda and support amendments to the NPI and NMFS for improved outcomes
* A teacher assembly shaped on a ***mini public*** could be convened to realise these improvements

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