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The wicked problem of including non-formal, CPD micro-qualifications in national qualifications frameworks (NQFs)

A think-piece

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1. Abstract/Introductory Note

This think-piece was written in advance of the concluding conference for the EU Erasmus+ Project: NQF-IN – ‘**Developing organisational and financial models for including non-formal sector qualifications in national qualifications frameworks**’, Warsaw, 5-6 June 2018. The main purpose of the conference is/was to present the draft analytical report on models of inclusion based on seven country reports produced by the project partners from Poland, France, Ireland, Croatia, Scotland, Hungary and the Czech Republic. The conference also intended to present a wider EU perspective from the EQF-LLL and a global perspective from UNESCO on the main theme. Participants from *circa* sixteen EU countries were invited to comment on the conference presentations and on the draft report. Comments will inform the final report to be produced by the project partners before August 2018.

The purpose of this particular think-piece at the time of writing is to offer other possible lenses outside the remit of the NQF-IN report on models through which to look at approaches to, and systems for, including non-formal qualifications in NQFs by regarding the challenges experienced as a ‘wicked’ problem with no obvious, tidy solution.

The decision to focus on CPD micro-qualifications arose from the outcomes of a national seminar on Qualifications Trends and Foresights organised as an element of the NQF-IN project in the Dublin

Institute of Technology in March 2018 supported by Quality & Qualifications Ireland (QQI). The seminar posed two main discussion questions to presenters and participants:

Question 1: Should a broader range of qualifications be included in the Irish NFQ, and if so, how?

Question 2: Should the NFQ be used to control access to the market for education and training qualifications?

A specific outcome of the seminar was that, in the sphere of CPD activities within companies, organisations and sectors, there is declining desire to engage in a lengthy and costly process of achieving formal status for learning activities within the NQF and an increasing tendency to create localised systems of micro-qualifications recognition through pre-delivery credit-rating and establishing of ‘academies’ within which such credits have socially-recognised currency. It was evident from the seminar that, while the NQF and the awards contained within it are respected and trusted for what they are, the prevailing view is that the technologies of formal qualifications – ECTS credits, levels, semesters etc – are wholly unsuitable for a CPD world where peer-regard, responsiveness, flexibility and fitness-for-purpose are more valued.

So, two questions arising are:

1. Do non-formal, CPD micro-qualifications need to be included in an NQF and does it matter to the NQF system if they are not?
2. If there is a really good reason why they should be included, and if there are significant barriers to their inclusion, does this represent a wicked problem for NQF policy-makers and developers?

Casting a policy challenge as a ‘wicked’ problem provides an alternative analytical framework outside of the seductive orderliness of quantitative methods, legislative containment, useful science and technological solutions. This think-piece permits those associated with the project topic to adopt the stance of the scholar-researcher-policymaker, struggling some of the time with the messy inconvenience of qualitative analysis and collaborative critique in a field of practice increasingly dominated by positivist and technicist cultures.

2. So, what is a wicked problem?

The term ‘wicked problem’ was coined by design theorists Rittel and Webber in 1973 to draw attention to the complexities and challenges of addressing major social policy problems.

A 'wicked' problem differs from a 'tame' problem in that it lacks clarity of both aims and possible solutions, is difficult to articulate, and may not have internal logic. Wicked problems may come up against real-world constraints that scupper multiple, risk-free attempts at solving them. A wicked problem generally has the following ten characteristics:

- i. It defies a definite and clear formulation
- ii. It has no 'stopping rule' whereby logic would dictate that it had been solved
- iii. Its solution is not true or false, only good or bad
- iv. There is no simple way to test a solution to a wicked problem
- v. It cannot be studied through trial and error as the central solution is singular and irreversible
- vi. There is no limit to the number of solutions and approaches possible
- vii. All wicked problems are essentially unique
- viii. Wicked problems can always be described as symptoms of other problems
- ix. The way a wicked problem is discussed determines possible solutions
- x. Those who decide solutions to wicked problems have the responsibility to be 'right' since the consequences of their solutions can impact considerably on others.

Weker and Khademian (2008) added that wicked problems are unstructured, cross-cutting and relentless. Head (2008) further developed the original ten characteristics by adding the dimensions of complexity, uncertainty and divergence, using a pattern of intersecting circles. These intersections can vary across policy issues or problem domains. Existing patterns could be unsettled by circumstances, by new issues being added, by political changes, or by applying new policy instruments to the problem area.

Responsibility to solve wicked problems can shift over time, and policy issues can be re-defined or re-prioritised. Thus, wickedness is not simply about a clash of ideas and values. It is also implicated in laws, structures, processes, institutional arrangements, and can include power, authority and procedural rules. Alford and Head (2017) offers a typology and contingency framework for wicked and tame problems as follows:

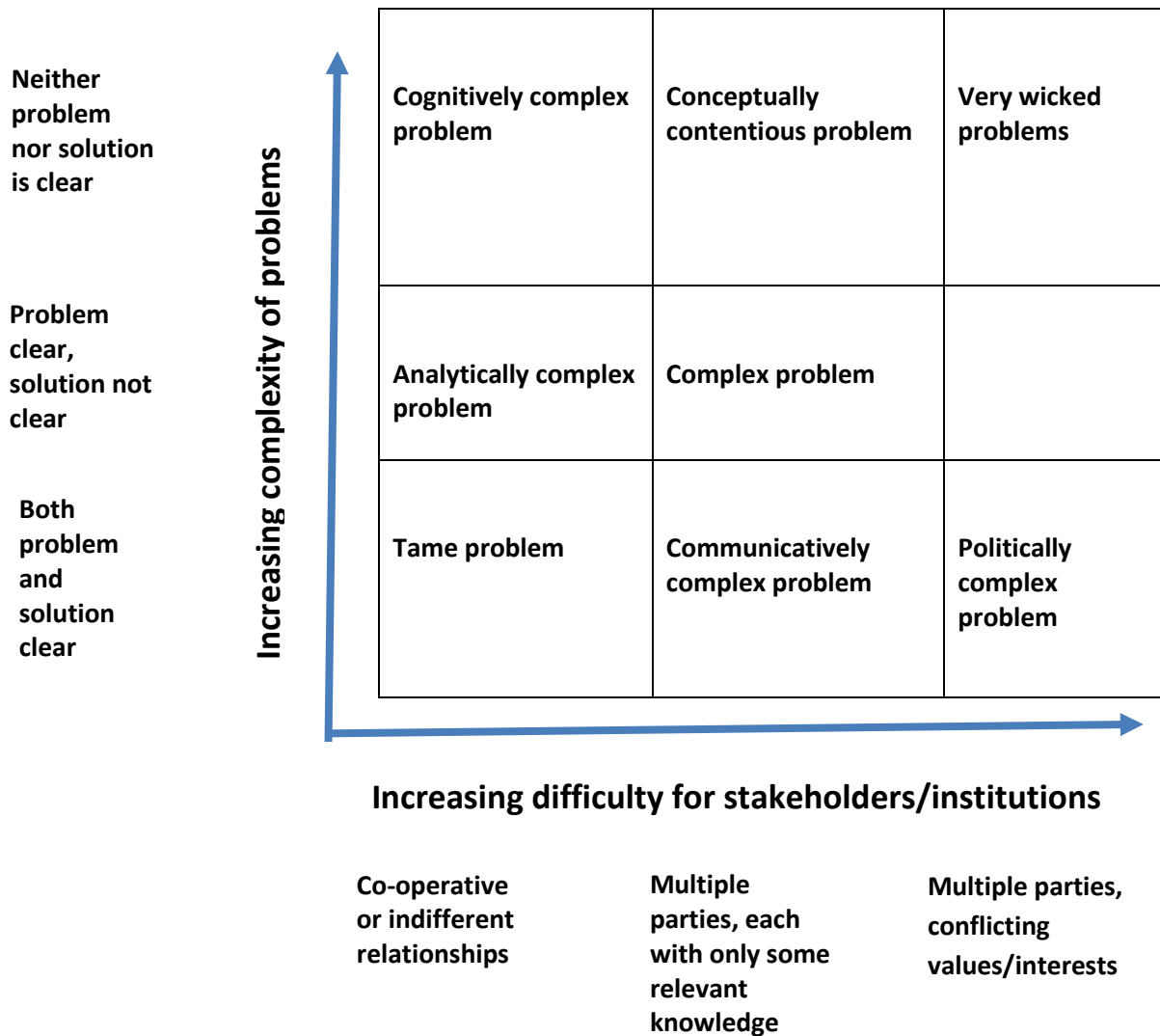


Figure 1: Alternative types of complex problems

Head (2008) cautions against using the same typology of wicked problems across everyday, complex problems, or across cases of urgency where there is pressure for immediate action using old solutions without space to integrate new thinking. He adds that major social problem solutions tend to favour the wider reinforcement of past practices through group-think from the top about tactical responses. He adds that institutional learning tends to occur – if at all – only when immediate pressures have been alleviated. He further argues that bureaucracies invariably tend to focus on authoritative processes to resolve issues, particularly where there is an expectation of achieving greater efficiencies. Thus it becomes increasingly difficult to manage wicked problems where there are divergent expectations underpinned by political interests.

3. Other ways to think about wickedly complex problems

There is some merit in thinking about the complexity, and perhaps the ‘wickedness’, of how to value non-formal qualifications in general, and CPD micro-qualifications in particular, within national qualifications frameworks since most national frameworks were initiated to represent formal qualifications at school, VET and higher education levels in the first instance. There is also merit in thinking about Thorngate’s postulate of commensurate complexity, and Fenwick’s critique of philosophical assumptions underpinning research paradigms for the purpose of social policy development.

3.1 Thorngate’s meta-theoretical virtues

When seeking solutions to wicked problems across multiple contexts, it may not be possible to simultaneously achieve the three virtues of generality, accuracy and simplicity (Thorngate, 1976).

Commentary on Thorngate includes Weick’s logical summary (2001):

- If research aims to be accurate and simple it results would not be generally applicable
- If research aims to be general and simple it results will not be accurate
- if research aims to be general and accurate its results will not be simple to use.

Eventually, in this trade-off, only two virtues can be achieved at any given time. Therefore, research must operate in different modes to capture reality in sufficient precision and granularity.

3.2 Fenwick’s critique of blurry ontologies

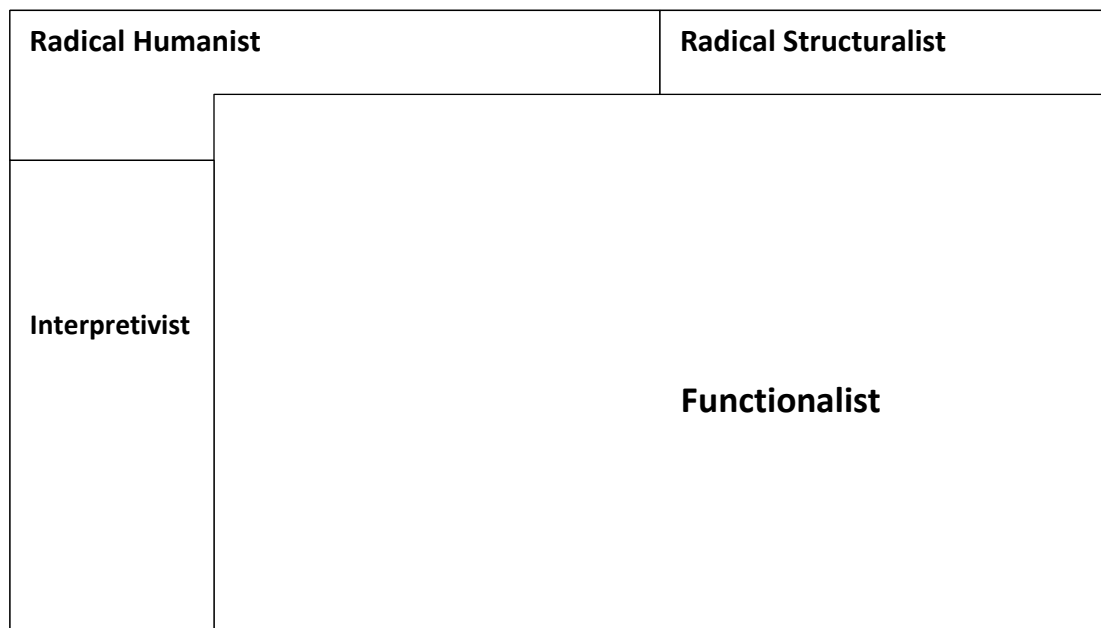
Fenwick (2010) argues that research in adult education and in work-based learning has increasingly become seduced by functionalist ontologies. She claims that, because work is both a site of economic conflict and a site of knowledge production, learning at and through work – as in non-formal learning – needs to be approached as a ‘messy object’ existing in different states, or as different objects patched together through imposed linkages.

It could be added here that all learning that is not formally structured is thus!

Following this logic, it has been agreed by many that non-formal learning - including adult learning, CPD, internships etc – should continue to be researched from an appropriate philosophical paradigm with explicit ontological and epistemological assumptions.

Goles and Hirschheim (2000) presented a useful critique of Burrell and Morgan's typology of research paradigms which have some relevance and usefulness for the wicked problem of how to manage non-formal qualifications in NQFs. Their paradigmatic model below in Figure 2, slightly augmented, is useful as both a descriptive and as a predictive tool when analysing trends and futures in how non-formal qualifications are researched for the purpose of policy development and policy implementation in the EU.

Seeks radical change



Seeks increasing regulation

Figure 2: The dominant (future?) paradigm of qualifications frameworks design

In this representation, Burrell and Morgans' quadrants of broad research paradigms – radical humanist, radical structuralist, interpretivist and functionalist – are augmented with polarities of 'radical change' and 'increasing regulation'. In their representation there has been extreme colonisation of other paraigms

by the functionalist paradigm. Even allowing for areas of blurred paradigmatic research approaches at the boundaries of discrete paradigms it is clearly argued that the current paradigm of policy-oriented education research with regard to NQF development and implementation is predominantly functionalist.

4. Useful questions arising

So, are older NQFs considering inclusion on non-formal qualifications as tame or wicked problems?

Are older NQFs reflecting the paradigm shift to functionalism and away from their humanist roots?

Where do newer NQFs sit with regard to their problem-solving ontologies?

Are there predictive trends regardless of contexts?

Is all well with regard to the direction of NQF policy-orientation in the EU?

If all is not well, we could regard the Bologna/EAHE Framework, the EQF-LLL, VET frameworks, sectoral frameworks, credit frameworks and professional frameworks as tools struggling to solve multiple wicked problems? Have the tools of learning outcomes, levels, credits and semesters been grasped as 'group-think' policy solutions regardless of the wickedness of qualifications contexts beyond formal VET and HE? Has the EU failed to find a solution which has the qualities of simplicity, accuracy and complexity. We could regard current policy-solving approaches as functionalist or techno-rational, if we accept the influence of such a paradigm.

So, is there evidence from evaluation and review exercises within older NQFs that problem-solving approaches are appropriate and efficient within their own contexts? Perhaps, they too have experienced the factors which re-define wicked problems, which shift political priorities, and which impact differently on different sectors within education and training.

What may be scarce, however, is a body of critical literature on philosophical assumptions underpinning NQFs in the EU, though there is a rich body of critique on the South African, Australian and New Zealand frameworks. Scholarly/academic publications around the Irish NQF are relatively few – other than formal review reports - compared to the extensive body of descriptive, explanatory, promotional and operational literature produced in the last fifteen years. This is not to concede that the NQF and the processes which developed and operationalised it have been free from critique. As illustrative of this last point, it is perhaps appropriate to a think-piece to offer direct quotations from other critical think-pieces since the

Launch of the Irish NQF: Granville (2003), Duff (2011), Fitzsimmons and Dorman (2013), O'Connor (2017) followed by a key findings from the Country Report for Ireland (Murphy, 2017).

a. In 2003, the year the NQF was launched, Granville – a senior academic - cautioned and predicted as follows:

The Irish framework is still in the early stages of its evolution, and it faces a difficult period of establishment. The framework, if it is too weak, will be a purely technical mechanism; if it is too strong, it may overpower the nuanced set of varied learning experiences from which it has grown.

From 'Stop making sense': chaos and coherence in the formulation of the Irish qualifications framework', Journal of Education and Work, Volume 16, Number 3, September 2003

b. In 2011, Duff, a long-term senior academic manager and higher education policy developer/analyst, commented for an article in this journal as follows:

The Qualifications (Education and Training) Act 2003 highlighted the growing instrumentalist influence in policy provision with education/training systems increasingly becoming an important tool for governments in economic development terms. It also highlighted human capital theory, which is based on the assumption that vocational education is a productive investment and a means by which societies can achieve sustainable growth.

From 'Reflections on Ireland's education/training policy-making process leading to the National Framework of Qualifications: national and international influences', Level3 DIT online journal Issue 9 2011

c. In 2013, Fitzsimmons and Dorman, adult and community education practitioners, concluded the following regarding the model of credentialism in the Irish NQF:

However, there are tensions. The first of these relates to method and the way in which accreditation demands a certain level of standardisation... Standardisation ...casts the person allocating credits as the expert assuming the teacher knows best and can judge the extent to which learning is happening... Another tension arises because accreditation is a currency strong or weak depending on how valued it is in the marketplace; the higher the profile of the accreditor, the greater the value...It also over-emphasises authority-from-above, the powerful accrediting body, potentially ignoring credibility gained from appreciation by peers...the assimilation of much community education into further education, slots learners and learning at the lower, technical levels of the NQF and away from critical constructionist potentials it has more historically aligned itself with.

From 'Swimming in the swamp' – inquiry into accreditation, community development, and social change', The Adult Learner, AONTAS, Dublin

d. In 2017, O'Connor, a senior policy officer in QQI, in his Preface to the Coles' think-piece, *National Qualifications Frameworks: reflections and trajectories*, had this to say:

To-day, the NFQ is used in many different ways, such as to give value to and recognise learning achievements: to develop new qualifications; to offer advice and guidance about learning pathways; to report on qualifications attainment; to better match skills and jobs; to regulate access to occupations; to approve courses and qualifications for public funding; and to facilitate the international portability of qualifications'.

Significantly O'Connor also notes that the **regulatory** functions of the NQF has increased and that is now frequently used to 'confer an advantage or to ration access to a public benefit'. O'Connor warns that policy makers and practitioner must be alert to how the NQF is used and to the effects, opportunities and risks that such usages represent.

Endnote

In the 2017 NQF-IN Country Report for Ireland, as author, I concluded the following from research with non-formal providers, and I offer it here as an endnote:

Given the data from the feedback submissions to QQI White Papers and the NQF-In survey it is difficult to escape a perception that in the QQI Phase since the 2012 Act much innovatory practices have been 'colonised' by the norms of higher education. It is not surprising that HE is comfortable with the framework as it is, and that non-formal providers 'linked' to HE are less uncomfortable than the non-formal sector generally. The sector least comfortable, ironically, is the community and adult education sector which drove many of the innovations in the 1990s which led to the NQF. How this sector will continue to engage with the qualifications framework in the future is still difficult to predict.

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