Monitoring Progress towards SDG 4.1: Comparative Analysis of Curriculum and Assessment National Frameworks for Reading – Summary

September 2018
This paper presents the comparative analysis of 20 countries’ national curriculum frameworks (NAFs) and national assessment frameworks (NCFs) for Reading. The study was conducted with the purpose of examining the alignment between what countries intend to teach and what they assess. The study falls under the overall aim of the UNESCO Institute for Statistics (UIS) to support the monitoring of learning outcomes with regards to SDG 4.1, by finding ways to link them globally in a comparable way.

4.1: By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes.

4.1.1 Proportion of children and young people: (a) in grades 2/3; (b) at the end of primary; and (c) at the end of lower secondary achieving at least a minimum proficiency level in (i) reading and (ii) mathematics, by sex.

The initial analysis of 73 NAFs from 25 Member States revealed a consistently low coverage of the Metalinguistic Competency domain in NAFs (IBE-UNESCO and UIS, 2018). The NAF analytical study highlighted the need to further investigate the alignment of curriculum and assessment. The importance of alignment would provide insights and inform Member States not only to develop competency-related indicators within their NCFs, but also to effectively reflect them within their NAFs. The aim of this study is to compare NAFs and NCFs for Reading, ranging from Lower Primary to Lower Secondary education to examine the alignment between assessment and curricular outcomes in national frameworks. The underlying inquiry of this study is – how well, and in which domains, are assessment frameworks aligned with curriculum frameworks for Literacy- Reading; and what findings are most salient within such an inquiry?

Methodology

The investigation into this hypothesis led to a decision to map and analyse the NCFs of 20 Member States, whose NAFs had already been mapped. For this study’s comparative analyses, the NAFs and NCFs were mapped using the same Coding Scheme as the one used in the previous study (IBE-UNESCO and UIS, 2018), which allowed for a meticulous documentation of the presence and/or absence of learning outcomes and objectives in each framework. Moreover, commonalities and differences in the assessed and curricular content were identified and analysed by country, income classification levels, education levels, and languages.

NAF and NCF - mapping alignment:

The following categories and their descriptors inform the methodology used to guide the data analysis:

Aligned: NAF and NCF criteria (in reference to domains and sub-domains, as they conform to the Coding Scheme) are present in both NAFs and NCFs (values of 1).

Not aligned: NAF and NCF criteria are not aligned as per conformity to the Coding Scheme. Either

- NAF criterion is absent (value of 0) and NCF criterion is present (value of 1).
- NAF criterion is present (value of 1) and NCF criterion is absent (value of 0).

A total of 73 NAFs and NCFs, in English, French and Spanish, from a sample of 20 Member States1 and 7 regions of the world2, covering the three points of measurement of Indicator 4.1.1 (grades 2/3, end of primary, and end of lower secondary education) were mapped and analysed. The NAFs and NCFs criteria were coded into one quantitative database to allow for valid and meticulous comparative analyses at multiple levels. The database denoted the presence or absence, with a value of “1” or “0”, of a certain criterion in each NAF and NCF. Once mapped, the database analysed incidents of alignment between criteria to identify where in a NCF corresponding assessment criteria were present. Similarly, the database analysed incidents of non-alignment between corresponding NAF and NCF criteria at the domain or sub-domain levels.

---

1 The 20 Member States whose NAFs and NCFs were analysed for the purposes of this study were (in alphabetical order): Australia, Canada-Ontario, Canada-Quebec, Chile, England-UK, Estonia, France, Gambia, Honduras, Hong Kong, India, Ireland, Mauritius, Mexico, Micronesia, New Zealand, Peru, Qatar, Seychelles, and South Africa.

2 No frameworks were used from Central Asia due to language limitations.
In cases where an entire category - either domain or sub-domain - did not exist, a value of “0” was assigned across that category in the database.

Limitations of the study:

Before viewing the findings, it must be noted that due to the relative sample size used in this comparative analysis, the findings must be interpreted with careful attention and reasonable consideration before drawing invalid conclusions. It must also be noted that, in light of this limitation, no regional or income-related generalisations are to be made from the results of the analysis of this study. Moreover, and equally as important to note, is that the information in the quantitative database was analysed for quantity and presence of criteria, not quality. Therefore, the data presented does not necessarily represent rigour of curricular or assessment objectives, nor does it always capture the nuances present in pedagogy that are integral to curriculum. It also does not represent a way to standardise information across content areas. The conclusions drawn are based on the analyses conducted with the sample size collected and cannot be translated to wider generalisations outside the scope of this study.

Findings of the study

Analysis of NAF and NCF Alignment

As mentioned before, due to the relative sample size used in this comparative analysis, no regional, income- or language-related generalisations are to be made from the results of the analysis of this study, and as such these analyses are excluded from this summary.

An overall analysis of domain alignment revealed that the domain with the highest percentage of alignment between NAFs and NCFs is Reading Competency and the lowest percentage of alignment is found in Metalinguistic Competency (Figure 1). The finding of such a low percentage of alignment in Metalinguistic Competency is a commonality that was highlighted throughout all levels of analyses.

The classification of all NAFs and NCFs by education level based on the three points of measurement of SDG 4.1.1 was used for the analysis. The 73 frameworks were organized in such groups to allow for comparisons to be analysed. Among the three education levels, it can be seen, in Figure 2, that both Linguistic and Reading Competency are relatively equally distributed regardless of education level. The only domain that appears to be factored by education level in its alignment is Metalinguistic Competency. Specifically, in Lower Primary, an alignment percentage of 50% in Metalinguistic Competency is consistent with the developmental phases of reading acquisition which are higher in this domain in the early grades. This is also consistent with the processes that learners adopt when learning fundamental reading skills. Students must first understand the relationships between sounds, syllables, letters, and words in order to construct meaning from
them. These objectives and skills are all contained within the *Phonological Awareness* sub-domain, which is housed within the *Metalinguistic Competency* domain. In Upper Primary, an alignment percentage of 44% in *Metalinguistic Competency* is observed. The commonality seen between Lower Primary and Upper Primary in the domain *Metalinguistic Competency* could be explained by the curricular emphasis on the acquisition of this competency (domain) as fundamental to reading acquisition in accordance to the natural development of learners in the primary grades. In Lower Secondary, a lower alignment percentage is to be expected in the domain *Metalinguistic Competency* due to its foundational role in the development of reading for earlier education levels. It would therefore be appropriate to notice a decline in the alignment in the upper grades, as students have already developed the foundational skills needed to make meaning of the sounds and syllables they compile to make words.

**Non-Alignment Analysis**

*Linguistic Competency* is aligned in 63 out of 73 (86%) frameworks, compared to non-alignment in 10 out of 73 (14%) frameworks, which denotes that this competency is valued, included and aligned between assessment and curriculum across the data array of this study. *Reading Competency* is aligned in 73 out of 73 frameworks (100%), with 0% non-alignment. The data confirms that this domain is the highest aligned domain across all national frameworks included in this study.

*Metalinguistic Competency* is aligned in 16 out of 73 (22%) frameworks, compared to non-alignment in 35 out of 73 (48%) frameworks. It is within this domain that instances of ‘excluded data’ need to be highlighted in order to extrapolate numbers and to confirm the aforementioned trend of *Metalinguistic Competency*’s perplexing presence and absence in national frameworks regardless of region, income, or language classification. Throughout the findings of this study, this domain was represented by low alignment percentages. Therefore, it must be noted that in 30% of the compared frameworks used for this study, the domain *Metalinguistic Competency* was excluded in both the NAF as well as the NCF; again, this reinforces the trend that further study into the causation of this exclusion in national frameworks is merited.

**Conclusion**

The findings in this study highlight the need for a stronger alignment between NAFs and NCFs. Nonetheless, it is highly recommended that an expanded study with additional data sources be conducted. Utilising national frameworks as a data source for understanding the relationship between assessment and curricular learning outcomes is a starting point; however, it is recommended that supportive data sources be added to capture the complexities and nuance present in this relationship. Suggested additional data sources are school district curriculum frameworks, educators’ curricular annual grade plans, school districts’ standardized assessment tools, educator-created assessment tools and qualitative interviews with stakeholders in country.

Competency and content-based approaches, even a blend of both approaches, are found within the NAFs and NCFs included in this study; and both are important to understanding the educational philosophies that countries abide by. In order to strengthen this study, the differences of alignment between these three approaches could be examined. Knowing that the approach reflected in a Member State’s national framework is a manifestation of its educational philosophy and context, this expansion of the analysis would pose questions such as, is alignment affected by the approach of the national framework? Which approach in national frameworks displays a higher level of alignment; and can the relationship between assessment and curriculum be better understood by separating the sample size into approach categories?
Bibliography