

The Development of *Standards for the Use and Development of Classroom Teaching and Learning Materials*

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This paper describes the development of standards for the use of classroom teaching and learning materials. The draft standards included in this paper have been developed by International Association for Research on Textbooks on Educational Media (IARTEM). The standards were developed in Australia but have been discussed in a number of international forums, including the 2013 IARTEM conference at the University of Ostrava (Czech Republic). At this conference the standards were shared for feedback, validation and further research refinement and revision. Data was collected from IARTEM members about the standards and Professor Arno Reints from the University of Utrecht is leading an international IARTEM project to further develop the standards. Feedback on the standards can be made on the IARTEM website at any time – <http://iartemblog.wordpress.com/have-your-say/>.

The paper is divided into a number of sections:

- A. Origin of the standards
- B. Process of standard development
- C. Purpose of the standards
- D. The standards continuum
- E. Development of the domains
- F. The domains
- G. The standards

A. Origin of the standards

These standards and propositions grew out of:

- concerns about the level of classroom teaching and learning resources to support national curriculum;
- concerns about the limited attention given to access and use of classroom teaching and learning materials in teaching standards;
- concerns about capturing best practice in how teachers access and use classroom teaching and learning materials to match student learning needs and, as a result, enhance student learning outcomes;

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- concerns that current teaching standards neglect the role of teaching and learning resources and materials, and also neglect the complexity of selecting, preparing and using teaching and learning materials.

These standards draw their inspiration from an approach which regards individual and collective teacher qualities and characteristics, as shaping, but also responding to and reflecting, the school context. Teaching practices and teaching quality emerge from the complex interactions between resources, teachers and schools.

In this view, teaching quality reflects not just the qualities of individual teachers and teaching teams, but also the parameters of teachers' work in their schools. These parameters include:

- planning time and planning opportunities;
- the classroom teaching and learning resources available at schools;
- teachers' workloads and activities;
- the nature of students in teachers' classes.

As a result, the standards also draw inspiration from the view that it is the way that teachers use classroom teaching and learning materials that is critical in affording or constraining student learning. However, teachers use and mediation of classroom teaching and learning materials is also dependent on access to classroom resources.

B. Process of standards development

The process of developing the draft standards propositions reflects the steps undertaken in previous standards development work. These steps include:

1. teacher discussions to explicate key domains and potential standards;
2. teacher consultations and feedback to refine the domains and initial draft standards;
3. teacher explorations and feedback to consider the draft domains and standards;
4. stakeholder consultation and feedback on the shape and structure of the domains and standards;
5. validation of the standards.

C. Purposes of the standards

The purposes of the standards are to:

- promote best practice in accessing and using classroom teaching and learning materials;
- make teaching quality in accessing and using classroom teaching and learning materials more explicit;

- promote curriculum leadership to support the curriculum;
- raise the profile and importance of the role of classroom teaching and learning materials in quality teaching.

D. Standards continuum

Discussions with teachers and analysis of research revealed three levels of capability in relation to the standards developed.

At the lower level of capability, it was proposed that *novice teachers*:

- were more resource driven in their planning and less curriculum or student need driven;
- had fewer skills in matching resources to their learners;
- were more likely to favour digital over print resources;
- were more likely to use teachers' guides and similar support materials in their planning;
- were less likely to demand and/or agitate for classroom resources;
- spent as much time as experienced teachers in locating and selecting and preparing resources;
- demonstrated less understanding of the learning affordances and constraints in classroom teaching and learning materials;
- were less skilled in scaffolding the use of classroom resources by their students.

At the *experienced/expert* level of capability, there was widespread agreement that expert experienced teachers:

- are planning, rather than resource, driven as they focus on accessing and selecting resources to the level and interest of their students through their knowledge of content, their pedagogical content knowledge and their knowledge of students.

At the highest level of capability, there was widespread agreement that *classroom teaching and learning materials leadership* was displayed by a range of teachers who developed resources for other teachers. These creators of new resources included:

- textbook authors and publishers;
- creators of school based classroom teaching and learning resources for groups of teachers;
- curriculum writers and unit writers from education systems and curriculum authorities, who created new classroom resources to support curriculum development.

The standards developed are not presented in a continuum to reflect these three levels of capability.

E. Development of draft domains

In developing the draft standards domains extensive discussions were held with teachers. These discussions were focused on the way that the selection, use and adaptation of classroom teaching and learning materials were central to the core business of teachers work. Teachers reported that gaining access to teaching and learning materials and providing these resources to their students was a central teaching and learning activity. As well, evaluating and selecting the appropriate teaching and learning resources and planning to use them in the classroom were core teaching activities. In the same way, using teaching and learning materials in the classroom, based on their understanding of them, were also seen as critical in teaching and learning by teachers. Often using teaching and learning materials in the classroom requires their customisation and adaptation by teachers, and sometimes their development of new teaching and learning materials. These activities in relation to classroom teaching and learning were described by teachers as core aspects of classroom teaching and learning. These core aspects of classroom teaching and learning reflected the teacher, their school context, and the schools resources and traditions.

The domains reflect:

- the crucial role of teaching and learning materials in teaching;
- the relationship between teacher planning and access to and planning for use of teaching materials;
- the role of teachers in adapting, customising and mediating classroom teaching and learning materials for their classes;
- the effective use of classroom teaching and learning materials;
- the characteristics of classroom teaching and learning resources that present learning affordance and constraint.

F. The domains

- (1) Accessing classroom teaching and learning materials.
- (2) Planning to evaluate, select, use and develop classroom teaching and learning materials and preparing (producing) them.
- (3) Understanding the characteristics of teaching and learning materials that may afford or constrain learning.
- (4) Customising and adapting teaching and learning materials for the students in the class.
- (5) Supporting curriculum.
- (6) Using classroom teaching and learning materials in teaching and learning.
- (7) Creating and developing new classroom teaching and learning materials.

G. The standards

1 Access

Teachers:

- ensure that all students have access to individual copies of appropriate teaching and learning resources both print and digital for use both at home and school;
- should seek budgeting models, that promote individual teacher autonomy and, at the same time, support strategic investment;
- ensure that multiple print and digital classroom teaching and learning resources should be available for every topic they teach;
- agitate for a minimum level of classroom teaching and learning resources per student, class and school;
- create their own teaching and learning resources for their students, where appropriate;
- supplement school resources when they are lacking through their own classroom resource purchase and/or development;
- balance the print and digital resource needs of their classrooms;
- exercise autonomy by selecting the appropriate teaching and learning resources for their students, both individually and in collegial groups;
- exercise autonomy by making all the decisions about accessing and purchasing teaching and learning materials for their students;
- demonstrate responsibility in caring for existing class and school resources, and adding to them.

2 Planning

Teachers:

- seek access to a wide corpus of teaching and learning materials in the planning process;
- evaluate all the available teaching and learning materials for a unit of work/topic in the planning process;
- access professional development on the corpus of existing classroom resources;
- access appropriate planning time;
- access appropriate planning resources;
- focus planning on selecting teaching and learning resources based on matching resources to the students in their classes;
- ensure planning processes are curriculum, unit, concept and topic driven, rather than resource driven;
- focus planning on using and adapting published teaching and learning resources, rather than initially creating and producing them;
- focus planning on students and their contexts; this child, this classroom, this school, this community;

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- align resource selection processes to how the resource will meet the aims of the unit and the curriculum within the student context;
 - consider environmental consequences in the production of class teaching and learning resources;
 - reflect the regulatory framework in the production of class teaching and learning resources;
 - balance planning time between accessing, seeking, evaluation, planning for use and preparing and producing class teaching and learning resources

3 Characteristics of classroom teaching and learning materials

Teachers:

- understand the linguistic and literacy features of classroom teaching and learning materials;
- assess the conceptual and reading demands of print and digital classroom resources on their student readers;
- understand the multimodal demands current classroom teaching and learning resources make on student learners;
- understand how classroom teaching and learning resources represent disciplines and subjects and position textual and disciplinary communities;
- assess the learning affordances and constraints in the structure and design of the materials and their preparation;
- understand how the teaching and learning materials reflect community and social values;
- understand the pedagogical underpinnings of classroom teaching and learning resources;
- understand the way one classroom teaching and learning resource links and complements other teaching and learning resources;
- understand how classroom teaching and learning resources match individual students in their classroom at different levels of capability.

4 Customisation and adaptation

Teachers:

- make adaptations to make published print and digital resources more comprehensible and more interesting to learners;
- enhance existing classroom materials with current, up to date materials;
- adapt teaching classroom teaching and learning materials for their own pedagogical and teaching philosophies and dispositions;
- make adaptations so teaching and learning materials are responsive to cultural diversity and multiple identities;
- explicate the metaphors found in teaching and learning materials;

- differentiate print and digital teaching and learning materials for individual students;
- position teaching and learning materials to promote active citizenship and pluralism;
- make adaptations to teaching and learning materials to meet the needs of students with different type of learning disabilities.

5 Curriculum support

Teachers:

- access predominantly national curriculum resources for the national curriculum;
- contribute to the trialling and development of new classroom teaching and learning resources;
- share use and evaluation of new classroom teaching and learning resources created for the national curriculum with other teachers;
- understand that successful curriculum implementation will depend in part on digital and print resources constructed at the class, school and local level as well as the national one.

6 Use of teaching and learning resources

Teachers:

- create learning environments through the way they use print and digital classroom teaching and learning materials;
- articulate the learning environments they have created;
- understand that the quality of the learning environment depends on their use of print and digital classroom teaching and learning materials;
- use a wide range of print and digital resources as the basis of lessons;
- create effective learning environments by using teaching and learning resources for direct instruction, and for collaborative and creative learning;
- use different classroom teaching and learning resources in ways that provide opportunities to afford student learning.

7 Creation

This aspect of the domain requires further development with national publishers and the international publishers association.

IARTEM Conference post script

The standards were the subject of a round table discussion at the 12th IARTEM conference at the University of Ostrava involving 75 researchers, educationalists and publishers from 19 countries. Data from the round table is still be analysed. However, a number of themes were recognised in the responses to the standards.

- 90** These included: comments on the role of teaching standards development in national education systems; comments on the nature of textbooks and educational media and their different importance in different national education systems; general agreement that the standards represented an important aspect of teaching and learning; discussion of the potential importance of such standards in teacher education; and considerations of the alignment of the standard to different national systems of education. As well a survey has been developed to validate the standards and provide data for their further refinement. Some twenty participants from the conference completed the survey.

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