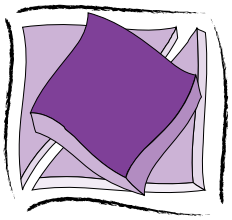
Quality teaching in NSW public schools

A classroom practice guide



A classroom practice guide
2nd edn.

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Professional Learning and Leadership Development Directorate
2006
RYDE NSW

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This publication is part of the series: *Quality teaching in NSW public schools.*

The series includes:

- *Quality teaching in NSW public schools: Discussion paper* (book)
- *Quality teaching in NSW public schools: Starting the discussion* (book)
- *Quality teaching in NSW public schools: An annotated bibliography* (book)
- *Quality teaching in NSW public schools: A DVD introduction* (DVD)

- *Quality teaching in NSW public schools: A classroom practice guide* (book)
- *Quality teaching in NSW public schools: Continuing the discussion about classroom practice* (book)
- *Quality teaching in NSW public schools: Continuing the discussion about classroom practice: Lesson extracts K–6* (video)
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- *Quality teaching in NSW public schools: An assessment practice guide* (book)
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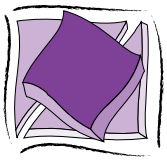

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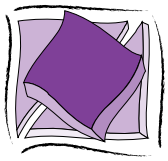
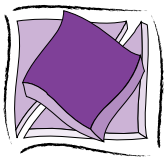


Acknowledgements

This guide has been developed by Dr James Ladwig and Professor Jennifer Gore from The University of Newcastle in consultation with and on behalf of the NSW Department of Education and Training. They are grateful to the many teachers and other NSW educators whose critical feedback and valuable suggestions have informed the final wording of this guide.

The coding scales and other notes in the guide have been informed by research reported in the *Quality teaching in NSW public schools: An annotated bibliography* (NSW Department of Education and Training, 2003). In particular, the coding scales are derived from earlier articulations of many elements of the model in studies conducted by: Professor Fred Newmann and associates on "authentic pedagogy" (1990–95) as part of the CORS (Center on Organization and Restructuring of Schools) research agenda, and Dr James Ladwig and Professor Bob Lingard (project directors) on "productive pedagogy" (1998–2000) as part of the QSRLS (Queensland School Reform Longitudinal Study). The coding scales provided in this guide build on, but substantially revise, these earlier elaborations.



Introduction

This guide has been developed to support school leaders and teachers in their implementation of the NSW model of pedagogy in relation to classroom practice. For the purpose of this guide, the term classroom practice is used to include learning activities, a single lesson, sequences of lessons, units and/or modules of work, and to refer to both plans for practice and observed (directly or videotaped) practice.

In May 2003 the Department released *Quality teaching in NSW public schools: Discussion paper* (NSW Department of Education and Training, 2003). The discussion paper was developed to focus and support the work of school leaders and teachers in addressing teaching and learning in NSW public schools as a long-term strategic priority. The paper proposes a model for pedagogy that can be applied from Kindergarten to Year 12 and across all key learning areas (KLAs).

The three dimensions and eighteen elements of the NSW model of pedagogy represent a synthesis of solid and reliable research that empirically links these general qualities of pedagogy to improved student learning. One of the strengths of the model is that it synthesises general characteristics of pedagogy, thus making it applicable across KLAs, subjects and years of schooling. In so doing, the model offers a coherent vision of pedagogy on a school-wide basis.

This guide has been written to assist schools in building that shared vision. It provides an elaboration of each of the eighteen elements of the model to assist teachers and school leaders to talk about pedagogy and to understand what constitutes quality teaching. The elaboration includes specific descriptions, a coding scale, notes and suggestions, all designed to help clarify what it means to teach well in relation to each element.

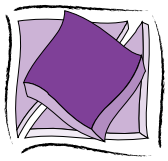
Using the guide

The primary purpose of this guide is to support teacher professional learning and professional dialogue. To this end, the guide can be used in two main ways. Coding sheets are included in the Appendix as tools to assist with both these uses.

Firstly, it is intended to guide teacher **reflection** and **analysis** where teachers, individually or in groups, can use the guide to analyse current classroom practices in order to understand how those practices might subsequently be improved. Such analysis can focus on written or observed (directly or videotaped) activities, lessons, a series of lessons and units or modules of work.

The document can also be used to guide the **planning** and **redesign** of activities, lessons and units of work. Again, working together or individually, teachers can consider how each element might inform their planning in order to maximise the student learning benefits of each learning experience.

It is important to reiterate that the purpose of this guide is to support teacher professional learning and practice. The coding process described in this guide should only be used where teachers have agreed to its use in relation to their work. The guide is not intended to be used for the purpose of teacher assessment. Any use for this purpose has the potential to undermine its value in supporting teacher professional learning and dialogue.



Structure of the document

This guide is organised around each of the eighteen elements of the NSW model of pedagogy. Each element is elaborated with the following information and set out as shown on the following page.

Description

Each element is described in general terms to indicate what might be observed when the element is highly evident, as opposed to what might be observed where there is little or no evidence of the element in classroom practice.

Coding scale

Each element is broken down into five "codes" or "scores" with a descriptor given for each one. The 1–5 coding scale draws upon **observable** aspects of classroom practice, hence its focus on *none*, *some*, *most*, and *all of the students*, or none of the time, through to all of the time. While the 1–5 descriptors in the coding scale refer to **lessons**, terms such as *activities*, *lesson plans*, *lesson sequences*, *modules* or *units of work* could also have been used.

The codes or scores provide the basis for professional reflection and/or dialogue. Coming to a shared understanding within a school, or among groups of staff, is in itself an important part of the professional development process in relation to the pedagogy model. Being able to name and identify each element is important in improving practice. Developing a deep understanding of each element as it relates to classroom practice can be enhanced with the elaboration provided in these coding scales.

Notes

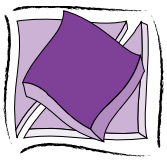
Notes are provided for each element to highlight certain reminders for teachers and in response to commonly asked questions about the meaning and application of the element.

Suggestions

While teachers should aim to score high in all three dimensions in all lessons, it is unrealistic to expect that every lesson will score highly for every element. Nonetheless, we encourage teachers to consider what it might take to move to the higher scores for each element. The suggestions provided in relation to each element offer some ideas for moving to the higher scores.

Further examples of teaching ideas can be found on the web site:
https://www.det.nsw.edu.au/proflearn/

For a one-stop-shop of teaching ideas linked to NSW syllabuses K–12 go to the Teaching and Learning Exchange (TaLE) on the Department's intranet at:
www.tale.edu.au



1.1 Deep knowledge

Description

Knowledge is deep when it concerns the central ideas or concepts of a topic, subject or KLA and when the knowledge is judged to be crucial to the topic, subject or KLA. Deep knowledge is evident when either the teacher or the students provide information, reasoning or arguments that address the centrality or complexity of a key concept or idea, or when relatively complex relations are established to other central concepts.

Knowledge is shallow or superficial when it does not concern significant concepts or key ideas of a topic, subject or KLA, or when concepts or ideas are fragmented and disconnected from a central focus. Knowledge is also shallow when important ideas are treated superficially by the teacher or students, or when there is no clear focus on an important idea or concept. This superficiality can arise from trying to cover large quantities of fragmented information that results in the content covered remaining unconnected to central ideas or concepts.

Notes

1. The essential difference between deep knowledge and deep understanding is that deep knowledge is about how **content** is presented in a lesson, while deep understanding is about the **learning** students demonstrate. It is possible for deep knowledge to be presented (by the teacher, students or guest speakers), but for students to demonstrate only superficial understanding, or vice versa.
2. In curriculum debates, a strong distinction is often made between **depth** and **breadth** of knowledge, which at times pits one against the other. It is important to recognise that substantial syllabus content coverage (some breadth) is necessary in order to achieve depth of knowledge. Consequently, depth cannot be achieved simply by focusing on "less" content.
3. The main issue related to deep knowledge is one of **quality**. Deep knowledge requires relevant syllabus content to be organised and taught in such a way that a small number of ideas or concepts are clearly established as the focus of the lesson. Depth is present if the content of a lesson is structured such that the central focus brings coherence and purpose to the lesson.

Coding scale

To what extent is the knowledge being addressed focused on a small number of key concepts and the relationships between and among concepts?

Deep knowledge

① Almost all of the content knowledge of the lesson is shallow because it does not deal with significant concepts or ideas.

② Some key concepts and ideas are mentioned or covered by the teacher or students, but only at a superficial level.

③ Knowledge is treated unevenly during instruction. A significant idea may be addressed as part of the lesson, but in general the focus on key concepts and ideas is not sustained throughout the lesson.

④ Most of the content knowledge of the lesson is deep. Sustained focus on central concepts or ideas is occasionally interrupted by superficial or unrelated ideas or concepts.

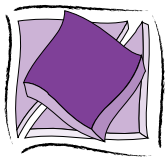
⑤ Knowledge is deep because focus is sustained on key ideas or concepts throughout the lesson.

Suggestions

- Identify and review students' prior knowledge as a starting place for addressing deep knowledge.
- Identify significant concepts in syllabuses by reviewing objectives, outcomes, content (e.g. *learn about* and *learn to* statements) and stage statements. Reflect on how the syllabus content can explicitly illustrate the concepts.
- Identify the key concepts and relationships to be addressed by asking the questions: *What do I want the students to learn*? and *Why does that learning matter*?
- Check that you have identified the key concept or relationship by asking the question: *How well does the concept or relationship draw the content together*?
- Map outcomes and content during unit planning so that each lesson focuses on illustrating significant concepts while addressing manageable amounts of content.
- Connect key concepts being addressed from lesson to lesson.
- Use learning tools in both planning and teaching to connect, identify and clarify knowledge, e.g. concept maps which explain relationships within a complex issue or topic.
- Select specialised resources carefully to build deep knowledge. These could include field experts, the local community and services, the Internet, multimedia and out-of-school visits.
- Provide unit or module overviews for students so that they can see how the concepts fit into the overall picture.

Two sample coding sheets are provided in the Appendix to assist in the coding process. The sheets can be used to record the scores for each element following an observation or review of classroom practice.

A coding scale overview is also provided to enable easy access to the coding scales for all the elements. This overview is best used once observers have a deep understanding of each of the elements in the guide.



Using the coding scales

You can use the coding scales in this guide to code written or observed (directly or videotaped) classroom practice, with the aim of reflecting on and refining or redeveloping this practice.

Coding scales for use in reflecting on, analysing and redesigning assessment tasks are to be provided in a separate document: *An assessment practice guide* (NSW Department of Education and Training, 2004).

Steps in the coding process

When coding classroom practice, it is suggested that you follow these four simple steps.

1. Have a copy of this guide and a coding sheet with you. Two different coding sheets can be found in the Appendix.
2. Observe the lesson, watch the videotaped lesson segment, read or reflect on the lesson or unit plan.
3. While observing, reading or reflecting, note down any comments or evidence of what you see.
4. After you finish watching, reading or reflecting, refer to the guide and go through each element one by one assigning a score. Refer to any notes you have taken and read carefully the coding scale, then assign a score for each element on your coding sheet.

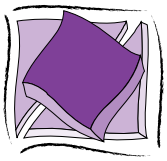
Assigning a score

When coding classroom practice, **you can only score what you can see**. This is an important concept to remember. In determining scores for each element, you should only consider the evidence seen during that specific period or within that specific written plan. You will be observing a segment of teaching or a plan for teaching at a moment in time.

There will be times when you cannot see evidence of an element in the observed lesson or in the lesson or unit plan, but are tempted to score the element high because you assume it has happened either beforehand or in the segments you did not see. Despite this, you must score only what you can see.

Similarly, if you do not see evidence of an element at all, you may be tempted to score this element as "not applicable", rather than a "1". For the purpose of coding you should always assign a score to each element. A score of "1" may not necessarily reflect poor pedagogy, but rather indicate simply that that particular element was not a feature of the lesson you observed.

When you are coding, consider the explanations given for each element, using the descriptions of the scores from 1–5. **Where you have difficulty in selecting between two scores, consider whether the minimum conditions of the higher score have been met. If these conditions have not been met, the lower score should be used**.



The five points on the coding scale represent distinctions that can be made in terms of the relative presence of the element. These distinctions, however, do not cover every possible way in which the element will manifest itself in classroom practice. In these instances you need to return to a judgement about whether the conditions for the higher score are met. If not, you assign the lower score, even if the lower score does not capture exactly what you observe.

Using the scores

Discuss your scores with others and reflect on what it means for improving classroom practice. The scores themselves are there to provide the basis for professional reflection, dialogue and development.

The document, *Continuing the discussion about classroom practice* (NSW Department of Education and Training, 2003) provides a range of ideas for how you can use the coding process for professional reflection, dialogue and development.

Remember that "5s" are not likely without concerted effort on the part of the teacher and the students.

Remember also that high scores are not achieved by a particular style of teaching or a particular type of classroom environment. Rather, high scores require an approach to teaching that is clear about the answers to these four questions:

- *What do you want the students to learn*?
- *Why does that learning matter*?
- *What are you going to get the students to do (or to produce)*?
- *How well do you expect them to do it*?

Finally, remember that the purpose of undertaking the coding is to strengthen personal classroom practice. Obviously, if you are working within a faculty, stage group or with an individual within their professional learning program, you would look at a number of lessons over time, as well as analysing units and assessment tasks. Each of these activities contributes to the quality of teaching, and it is important to see them all as part of a whole.

The NSW model of pedagogy

The model of pedagogy presented in the *Quality teaching in New South Wales public schools: Discussion paper* (NSW Department of Education and Training, 2003) has three dimensions that represent classroom practices that have been linked to improved student outcomes. These three dimensions are:

1. Pedagogy that promotes high levels of ***intellectual quality***.

   Intellectual quality refers to pedagogy focused on producing deep understanding of important, substantive concepts, skills and ideas. Such pedagogy treats knowledge as something that requires active construction and requires students to engage in higher-order thinking and to communicate substantively about what they are learning.

2. Pedagogy that establishes a high ***quality learning environment***.

   Quality learning environment refers to pedagogy that creates classrooms where students and teachers work productively in an environment clearly focused on learning. Such pedagogy sets high and explicit expectations and develops positive relationships between teachers and students and among students.

3. Pedagogy that generates ***significance*** by connecting students with the intellectual demands of their work.

   Significance refers to pedagogy that helps make learning more meaningful and important to students. Such pedagogy draws clear connections with students' prior knowledge and identities, with contexts outside of the classroom, and with multiple ways of knowing or cultural perspectives.

Each of the three dimensions of the NSW model of pedagogy is comprised of a number of elements. These elements are presented in Table 1.

	Intellectual quality	Quality learning environment	Significance
Elements	Deep knowledge	Explicit quality criteria	Background knowledge
	Deep understanding	Engagement	Cultural knowledge
	Problematic knowledge	High expectations	Knowledge integration
	Higher-order thinking	Social support	Inclusivity
	Metalanguage	Students' self-regulation	Connectedness
	Substantive communication	Student direction	Narrative

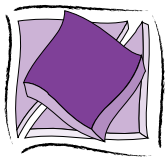
Table 1: The dimensions and elements of the NSW model of pedagogy

The discussion paper and other support materials related to *Quality teaching in NSW public schools* can be found on the web site:
https://www.det.nsw.edu.au/proflearn/

Dimension 1: Intellectual quality

Intellectual quality refers to pedagogy focused on producing deep understanding of important, substantive concepts, skills and ideas. Such pedagogy treats knowledge as something that requires active construction and requires students to engage in higher-order thinking and to communicate substantively about what they are learning.

Elements
1.1 Deep knowledge
1.2 Deep understanding
1.3 Problematic knowledge
1.4 Higher-order thinking
1.5 Metalanguage
1.6 Substantive communication



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Knowledge is shallow when it does not concern significant concepts or key ideas of a topic, subject or KLA, or when concepts or ideas are fragmented and disconnected from a central focus. Knowledge is also shallow when important ideas are treated superficially by the teacher or students, or when there is no clear focus on an important idea or concept. This superficiality can arise from trying to cover large quantities of fragmented information that results in the content covered remaining unconnected to central ideas or concepts.

Coding scale

To what extent is the knowledge being addressed focused on a small number of key concepts and the relationships between and among concepts?

Deep knowledge

1. Almost all of the content knowledge of the lesson is shallow because it does not deal with significant concepts or ideas.

2. Some key concepts and ideas are mentioned or covered by the teacher or students, but only at a superficial level.

3. Knowledge is treated unevenly during instruction. A significant idea may be addressed as part of the lesson, but in general the focus on key concepts and ideas is not sustained throughout the lesson.

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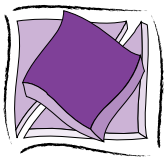
5. Knowledge is deep because focus is sustained on key ideas or concepts throughout the lesson.



Notes

1. The essential difference between deep knowledge and deep understanding is that deep knowledge is about how **content** is presented in a lesson, while deep understanding is about the **learning** students demonstrate. It is possible for deep knowledge to be presented (by the teacher, students or guest speakers), but for students to demonstrate only superficial understanding, or vice versa.
2. In curriculum debates, a strong distinction is often made between **depth** and **breadth** of knowledge, which at times pits one against the other. It is important to recognise that substantial syllabus content coverage (some breadth) is necessary in order to achieve depth of knowledge. Consequently, depth cannot be achieved simply by focusing on "less" content.
3. The main issue related to deep knowledge is one of **quality**. Deep knowledge requires relevant syllabus content to be organised and taught in such a way that a small number of ideas or concepts are clearly established as the focus of the lesson. Depth is present if the content of a lesson is structured such that the central focus brings coherence and purpose to the lesson.

Suggestions

- Identify and review students' prior knowledge as a starting place for addressing deep knowledge.
- Identify significant concepts in syllabuses by reviewing objectives, outcomes, content (e.g. *learn about* and *learn to* statements) and stage statements. Reflect on how the syllabus content can explicitly illustrate the concepts.
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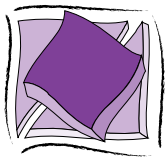
- Select specialised resources carefully to build deep knowledge. These could include field experts, the local community and services, the Internet, multimedia and out-of-school visits.
- Provide unit or module overviews for students so that they can see how the concepts fit into the overall picture.



1.2 Deep understanding

Description

Deep understanding is evident when students demonstrate their grasp of central ideas and concepts. Students demonstrate deep understanding when they explore relationships, solve problems, construct explanations and draw conclusions in relatively systematic, integrated or complex ways.

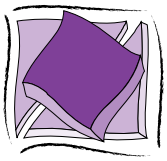
Understanding is shallow or superficial when students present ideas in a limited or narrow way. Shallow understanding is evident when students present misinformation, repeat fragmented pieces of information or routine tasks, or provide limited interpretations without making clear distinctions or demonstrating complex understandings.

Coding scale

To what extent do students demonstrate a profound and meaningful understanding of central ideas and the relationships between and among those central ideas?

Deep understanding

1. Students demonstrate only shallow understanding.
2. For most students, understanding is shallow during most of the lesson, with one or two minor exceptions.
3. Deep understanding is uneven. Students demonstrate both shallow and deeper understanding at different points in the lesson. A central concept understood by some students may not be understood by other students.
4. Most students provide information, arguments or reasoning that demonstrates deep understanding for a substantial portion of the lesson.
5. Almost all students demonstrate deep understanding throughout the lesson.

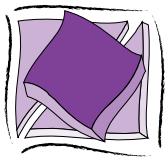


Notes

1. The essential difference between deep knowledge and deep understanding is that deep knowledge is about how **content** is presented in a lesson, while deep understanding is about the **learning** students demonstrate. It is possible for deep knowledge to be presented (by the teacher, students or guest speakers), but for students to demonstrate only superficial understanding, or vice versa.
2. Understanding can be demonstrated in oral, written, symbolic or performance modes. What is important is that opportunities for students to actively engage with the knowledge are built into the lesson plan. Opportunities for students to demonstrate their understanding include activities that require them to explore relationships, solve problems, construct explanations and draw conclusions.
3. Observing and coding lessons for deep understanding may require depth of knowledge of the specialist content on the part of the observer. While this may sometimes be true of all elements, it is particularly so when coding for deep understanding (and for knowledge integration).

Suggestions

- Plan for sufficient time in a lesson or across a sequence of lessons for students to demonstrate deep understanding.
- Provide models or tools to facilitate deep understanding and examples of work which demonstrate deep understanding.
- Incorporate regular assessment of understanding in unit planning.
- Plan to do less better.
- Provide a range of opportunities within the lesson and the unit for students to demonstrate deep understanding, e.g. problem solving in a group, developing or answering probing questions, and providing reasoned arguments for a point of view.



1.3 Problematic knowledge

Description

Knowledge is treated as problematic when it involves an understanding of knowledge not as a fixed body of information, but rather as being socially constructed, and hence subject to political, social and cultural influences and implications. Multiple, contrasting and potentially conflicting forms of knowledge are presented and recognised as constructed and open to question.

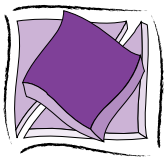
Knowledge is not treated as problematic when it is presented only as fact, a body of truth to be acquired by students, or is treated as static and open to only one interpretation.

Coding scale

To what extent are students encouraged to address multiple perspectives and/or solutions? To what extent are students able to recognise knowledge as constructed and therefore open to question?

Problematic knowledge

1. All knowledge is presented only as fact and not open to question.
2. Some knowledge is treated as open to multiple perspectives.
3. Knowledge is treated as open to multiple perspectives, seen as socially constructed and therefore open to question.
4. Knowledge is seen as socially constructed and multiple perspectives are not only presented, but are explored through questioning of their basic assumptions.
5. Knowledge is seen as socially constructed, with multiple and/or conflicting interpretations presented and explored to an extent that a judgement is made about the appropriateness of an interpretation in a given context.

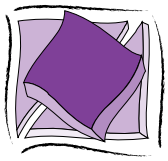


Notes

1. Treating knowledge as problematic requires students to explore the political, social and cultural assumptions underpinning particular viewpoints. Arguing a point of view, as in a debate, can assist in demonstrating that knowledge is problematic. Debates, however, do not necessarily lead to understanding the problematic nature of knowledge **unless** the opposing views are analysed in a way that interrogates the knowledge claims on which the views are based. For example, in languages, comparing concepts in English and in the target language becomes problematic **when** the elements of the target language (e.g. symbol systems, vocabulary, concepts) are analysed in relation to their social and cultural contexts.
2. Similarly, the expression of personal opinions or differing views do not in themselves demonstrate high levels of problematic knowledge **unless** the knowledge on which these views or opinions are based is open to query, and analysed as constructed and open to question.
3. Imagining or speculating about the future is not in itself treating knowledge as problematic. While students in undertaking such activities are constructing knowledge (i.e. higher-order thinking), **unless** they explore the assumptions underpinning their constructions, they are not treating knowledge as problematic.
4. It is important to recognise that understanding knowledge as problematic is not restricted to more mature students. Kindergarten students can be introduced to the idea of knowledge as problematic. For example, in talking about *my family*, they can see that families mean different things to different people (one, two or many parents; no siblings or many; extended family or nuclear) and that the notion of family depends on the circumstances.

Suggestions

- Identify and explore the assumptions underpinning a variety of perspectives when presenting a theme or topic. Provide tools to support students to challenge and question knowledge in order to identify assumptions.
- Include opportunities for students to construct their own knowledge, for example by conducting science experiments or engaging in other problem solving activities. Have students question the assumptions on which their solutions are based in order to investigate the social construction of knowledge.
- Identify and discuss how knowledge is viewed or constructed differently over time and by different groups. Depending on the context, ask students questions such as: *What is this about*? *What does the author want us to know*? *Why is this so*? *Whose point of view is expressed*? *Whose knowledge is this*? *Who is advantaged*? *Who is disadvantaged*? *How has this view changed over time*?
- If it is difficult to see how the knowledge of your subject area is problematic, look at its history. In some areas, such as in secondary science, historical dimensions of scientific knowledge have become part of the formal curriculum and help students recognise that scientific knowledge is open to social and historical dynamics. In other subjects, however, it may be necessary for the teacher or students to "dig out" the historical background behind the knowledge presented in a topic.
- Explore what a central concept of the unit may mean to a range of cultural groups, and how that meaning may have changed over time. Strategies for exploring these ideas could include well-informed role-playing and debate.



1.4 Higher-order thinking

Description

Higher-order thinking requires students to manipulate information and ideas in ways that transform their meaning and implications. This transformation occurs when students combine facts and ideas in order to synthesise, generalise, explain, hypothesise or arrive at some conclusion or interpretation. Manipulating information and ideas through these processes allows students to solve problems and create new (for them) meanings and understandings. When students demonstrate higher-order thinking, they may also generate unexpected concepts, ideas and products which can take the learning in new directions.

Lower-order thinking occurs when students are asked to deal only with factual information or to engage in repetitive activity. Students are exposed to pre-specified knowledge ranging from simple facts and information, to more complex ideas or concepts, through instructional processes that simply transmit knowledge or require practice of procedural routines. Lower-order thinking is evident when students are asked to recall information, define, describe, identify, list, reproduce, or state given content knowledge.

Coding scale

To what extent are students regularly engaged in thinking that requires them to organise, reorganise, apply, analyse, synthesise and evaluate knowledge and information?

Higher-order thinking

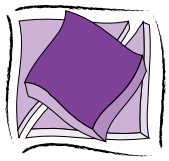
1. Students demonstrate only lower-order thinking. They either receive or recite pre-specified knowledge or participate in routine practice, and in no activities during the lesson do students go beyond simple reproduction of knowledge.

2. Students primarily demonstrate lower-order thinking, but at some point, at least some students perform higher-order thinking as a minor diversion within the lesson.

3. Students primarily demonstrate routine lower-order thinking a good share of the lesson. There is at least one significant question or activity in which most students perform some higher-order thinking.

4. Most students demonstrate higher-order thinking in at least one major activity that occupies a substantial portion of the lesson.

5. All students, almost all of the time, demonstrate higher-order thinking.

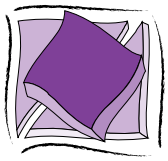


Notes

1. Lower-order thinking is essential to build the foundations for understanding. However, unless there are opportunities to engage in higher-order thinking, it is unlikely that students will achieve deep understanding of a concept.
2. Processes or tools for higher-order thinking result in deep understanding only if the ideas being addressed are substantive and relevant to the purpose of the lesson.
3. Thinking does not necessarily become higher-order thinking just by increasing the complexity of the task. Lower-order thinking can still be the focus of complex activities if, for example, students only need to follow pre-specified steps and routines, employ algorithms or write variations on sentence patterns, in a rote fashion.
4. Rehearsal or practice (e.g. of performances, of role-plays, of moves in sport, of ways of operating machinery) will involve higher-order thinking **if** students are required to problem-solve in order to create a different or improved result.

Suggestions

- Refer to Bloom's Taxonomy in order to frame higher-order questions and tasks.
- Provide opportunities for students to:
  - construct meaning from information (by classifying, summarising, inferring, comparing or explaining)
  - separate information, procedures or techniques into parts and determine how the parts relate to one another and/or how they relate to an overall purpose or structure (such as when students analyse, compare, contrast, organise, distinguish, examine, illustrate, point out, relate, explain, differentiate or organise content)
  - make judgements based on criteria and/or standards (such as when students evaluate, comment on, check, criticise, judge, critique, discriminate, justify or interpret content)
  - put elements together to form a coherent or functional whole, or reorganise elements into a new pattern (such as when students combine, create, design, plan, rearrange, reconstruct, generate or produce).
- Pose questions that can have multiple answers or possibilities and ask students to justify their responses and/or evaluate information from a variety of sources.
- Extend student thinking beyond recall by using follow-up questions such as: *Why would you say that*? *How does this compare with previous comments*? and *What might be the result if we changed the context*?
- Provide opportunities for students to evaluate, manipulate and transform information, e.g. developing a new product, movement composition, text or scenario.
- Plan at least one significant question requiring higher-order thinking in relation to each lesson activity.



1.5 Metalanguage

Description

Lessons high in metalanguage have high levels of talk about language and about how texts work. Teachers or students frequently take the opportunity to draw attention to particular aspects of texts (e.g. words, images, symbols) either at a key point in the lesson, or when students are obviously having difficulties in interpretation. Such discussion will often focus on pointing out how differing sentences, types of texts, discourses and other symbolic representations actually work; comparing and contrasting different texts; and showing how language and symbols can be used to construct texts, knowledge and power.

Lessons low in metalanguage have no explicit talk about language and language use or about how texts work. There is an emphasis on simply doing activities, without taking time out to question the structure and function of the language.

Coding scale

To what extent do lessons explicitly name and analyse knowledge as a specialist language? To what extent do lessons provide frequent commentary on language use and the various contexts of differing language uses?

Metalanguage

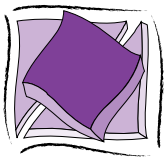
1. No metalanguage. The lesson proceeds without the teacher or students stopping to comment on the language being used.

2. Low metalanguage. During the lesson terminology is explained or either the teacher or students stop to make value judgements or comment on language. There is, however, no clarification or assistance provided regarding the language.

3. Some use of metalanguage. At the beginning of the lesson, or at some key juncture, the teacher or students stop and explain or conduct a "mini-lesson" on some aspect of language, e.g. genre, vocabulary, signs or symbols.

4. Periodic use of metalanguage. The teacher or students provide commentary on aspects of language at several points during the lesson.

5. High use of metalanguage. The lesson proceeds with frequent commentary on language use.

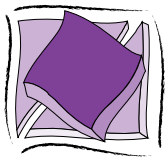


Notes

1. The specialist terminology of KLAs and subjects is not in itself metalanguage, **unless** its use is explained in non-specialist terms.
2. Simple explanations of language, such as giving definitions and using them in context are a basic form of metalanguage. More advanced uses of metalanguage would include consideration of how the language (or symbol system) being analysed works to structure meaning in particular ways. High levels of metalanguage in language lessons, for example, are evident when the translation process goes beyond simple "word-for-word" translations.
3. It is important to note that symbol systems (e.g. musical notation, scientific and mathematical equations, visual images) operate as forms of language when they structure meaning. Language about, or commentary on, how these symbolic systems function can be considered metalanguage.
4. Jokes, puns and ironic comments can be indicators of metalanguage when understanding them requires an understanding of the subtleties of the language by which the humour is conveyed.

Suggestions

- Identify the language or symbolic features that are essential for developing deep understanding of key concepts. Clarify meanings and definitions with students, and examine different usages in different contexts (where applicable).
- Use and "unpack" the specialist language of the subject, building on known language and appropriately pacing the introduction of new language and usage. For example, students might develop word banks or subject glossaries, compare multiple meanings of a word in different subjects and contexts, or identify key words and alternatives for Internet searches.
- Explicitly discuss the way language works in the context of the lesson or activity. For instance, this may mean looking closely at the differences that words, symbols or their ordering make. Some examples are:
  - Consider the difference in meaning between: *In your report list everything that* **occurred** *as the experiment proceeded;* and *In your report list everything that you* **saw** *or* **heard** *as the experiment proceeded*. (The second instruction highlights the role of observation in the construction of scientific knowledge.)
  - Examine the differences created by the placement of brackets in algebraic equations.
  - Examine the language of "gesture" in sport, the arts and multimedia. For example, in refereeing sports; *What are the attributes of the gestures and symbols used*? *What is the relationship between the sound (e.g. whistle) and the gesture*? *How important is speed*? *Why is accuracy of gesture so important*?
- Consider using etymology and the history of language in your subject area to build students' understanding of the concepts of the lesson.



1.6 Substantive communication

Description

In classes with high levels of substantive communication there is sustained interaction about the substance of the lesson. Classes high in substantive communication have three characteristics:

- there is **sustained** interaction
- the communication is focused on the **substance** of the lesson
- the interaction is **reciprocal**.

This element identifies the quality of communication (oral, written or symbolic) required to promote coherent shared understanding.

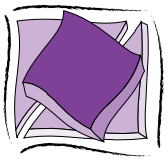
In classes where there is little or no substantive communication, teacher-student interaction typically takes the form of the teacher delivering information and asking routine questions and the students giving very short answers. Discussion tends to follow the typical "initiate–respond–evaluate" (IRE) pattern with low level recall, fact-based questions, short utterances or single word responses, and further simple questions and/or teacher evaluation statements (e.g. "yes", "good"). This is a routine, teacher-centred pattern that requires students to "fill in the blank" or "guess what's in the teacher's head".

Coding scale

To what extent are students regularly engaged in sustained conversations (in oral, written or artistic forms) about the ideas and concepts they are encountering?

Substantive communication

1. Almost no substantive communication occurs during the lesson.
2. Substantive communication among students and/or between teacher and students occurs briefly.
3. Substantive communication among students and/or between teacher and students occurs occasionally and involves at least two sustained interactions.
4. Substantive communication, with sustained interactions, occurs over approximately half the lesson with teacher and/or students scaffolding the conversation.
5. Substantive communication, with sustained interactions, occurs throughout the lesson, with teachers and/or students scaffolding the communication.

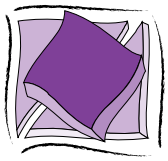


Notes

1. Substantive communication can be oral, written or symbolic.
2. Substantive communication has the following characteristics:
   - It is **sustained**; that is, the communication continues a thought or idea beyond the simple IRE (initiate–respond–evaluate) pattern by either:
     (a) logical extension or synthesis where the flow of communication carries a line of reasoning
     (b) building a dialogue where the flow of ideas is not scripted or controlled by one party. This could include using extended statements, direct comments, questions on statements from one participant to another, or the sharing of ideas through the selection or redirection of speakers.
   - The communication is focused on the **substance** of the lesson. It moves beyond mere recounting of experiences, facts, definitions or procedures and encourages critical reasoning such as making distinctions, applying ideas, forming generalisations and raising questions.
   - It is **reciprocal**; that is, the content of one person's contribution is taken up by others and the overall flow of information and ideas is at least two-way in direction.
3. IRE (initiate–respond–evaluate) refers to a format where the teacher asks a question, a student responds, the teacher makes evaluative comment indicating correct or incorrect response and then moves on to next question or lesson segment; as opposed to the question initiating extended dialogue on the topic or issue.

Suggestions

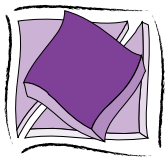
- Encourage students to generate questions about the topic for research and discussion and use these as the basis for lesson development.
- Frame questions which require more depth in response from students than the initiate–respond–evaluate (IRE) format does. Encourage students to extend their responses to make thinking and understanding explicit. Ask students: *Why do you think that*? *How did you get to that solution or viewpoint*? *How is this like or different from …*?
- Frame questions that facilitate reciprocal interaction, rather than mere error correction.
- Teach and model skills and protocols for substantive communication, e.g. active listening, turn-taking, open-ended questioning, Socratic dialogue, giving constructive feedback, debating and using body language.
- Develop opportunities and structures for substantive communication, e.g. in pairs, small group discussion and cooperative learning activities, to allow students to share substantive ideas about the lesson topic.
- In language classes, provide opportunities for students to use the target language for purposeful communication.



Dimension 2: Quality learning environment

Quality learning environment refers to pedagogy that creates classrooms where students and teachers work productively in an environment clearly focused on learning. Such pedagogy sets high and explicit expectations and develops positive relationships between teachers and students and among students.

Elements
2.1 Explicit quality criteria
2 .2 Engagement
2.3 High expectations
2.4 Social support
2.5 Students' self-regulation
2.6 Student direction



2.1 Explicit quality criteria

Description

High explicit quality criteria is identified by frequent, detailed and specific statements about the quality of work required of students. Explicit quality criteria become reference points when the teacher and/or students use the criteria to develop and check their own work or the work of others.

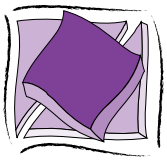
Low explicit quality criteria is identified by an absence of written or spoken reference to the quality of work expected of students. Reference to technical or procedural requirements only (such as the number of examples, length of an essay or the duration of a presentation) is not evidence of explicit quality criteria.

Coding scale

To what extent are students provided with explicit criteria for the quality of work they are to produce? To what extent are those criteria a regular reference point for the development and assessment of student work?

Explicit quality criteria

1. No explicit statements regarding the quality of work are made. Only technical and procedural criteria are made explicit.
2. Only general statements are made regarding the desired quality of the work.
3. Detailed criteria regarding the quality of work are made explicit during the lesson, but there is no evidence that students are using the criteria to examine the quality of their work.
4. Detailed criteria regarding the quality of work are made explicit or reinforced during the lesson and there is evidence of some students, some of the time, examining the quality of their work in relation to these criteria.
5. Detailed criteria regarding the quality of work are made explicit or reinforced throughout the lesson and there is consistent evidence of students examining the quality of their work in relation to these criteria.

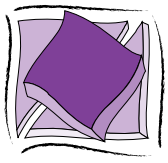


Notes

1. Designating what students are to do in order to complete a task does not by itself clarify what counts as high quality work. Merely outlining what students are supposed to complete is procedural. Explicit quality criteria, on the other hand, clarify for all students what the teacher expects in terms of a high quality completion of a task.
2. In some lessons and activities, explicit quality criteria should not be pre-specified, but rather allowed to develop as students are required to create their own work. When observing these lessons or activities, the question of explicit quality criteria relies on whether you can see students interacting with the quality criteria as they develop.
3. While the coding scale places value on the articulation of detailed criteria, simply listing detailed criteria may not give a full picture of what constitutes high quality work. For instance, at times when the "whole is greater than the sum of the parts", it may be useful to discuss the difference between a holistic impression in contrast to a point by point analysis.

Suggestions

- Ask the questions: *What do I expect the students to produce*? and *How well do I expect them to do it*?
- Provide students with clear criteria that explicitly describe the quality of work expected. This could be developed with the class through initial brainstorming and then discussion and refinement or through the development of an assessment rubric.
- Assist students to clarify the criteria to reach a shared understanding of what is expected, e.g. have students re-state in their own words what is meant by the criteria and identify examples of the criteria in their work and the work of other students.
- Assist students to use the quality criteria to reflect on and modify their work as it develops. This may assist students to develop skills in self-evaluation.
- Use the criteria to assess student work and to provide feedback during development, as well as on completion of the task.
- Provide annotated exemplars, work samples or models that illustrate high quality student performance based on the criteria. These exemplars could be work from past students and other sources.



2.2 Engagement

Description

High engagement is identified by on-task behaviours that signal a serious investment in class work. These behaviours include sustained interest and attentiveness, individual focus on work, showing enthusiasm for the work, and taking the work seriously. High engagement may also be evident when students take the initiative to raise questions, contribute to group tasks and help peers.

Low engagement or disengagement is identified by off-task behaviours that signal boredom, a lack of effort by students or effort directed into non-class activities. These behaviours include disrupting the class, talking to peers about non-class matters or day dreaming. It is assumed these behaviours indicate that students are not taking seriously the substantive work of the lesson.

Coding scale

To what extent are most students, most of the time, seriously engaged in the lesson? To what extent do students display sustained interest and attention?

Engagement

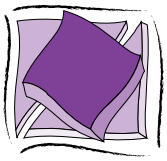
1. Low engagement or disengagement. Students are frequently off-task, perhaps disruptive, as evidenced by inattentiveness or serious disruptions by many. This is the central characteristic during much of the lesson.

2. Sporadic engagement. Most students, most of the time, either appear apathetic and indifferent or are only occasionally active in carrying out assigned activities. Some students might be clearly off-task.

3. Variable engagement. Most students are seriously engaged in parts of the lesson, but may appear indifferent during other parts and very few students are clearly off-task.

4. Widespread engagement. Most students, most of the time, are on-task pursuing the substance of the lesson. Most students seem to be taking the work seriously and trying hard.

5. Serious engagement. All students are deeply involved, almost all of the time, in pursuing the substance of the lesson.

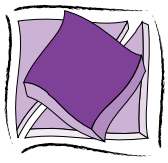


Notes

1. Student engagement is central to learning, and in this sense is fundamental to the work of teachers. Beyond students simply being on-task, the question becomes one of trying to gauge just how much serious investment students have in the work of a lesson.
2. Overt expressions of enthusiasm, or clear demonstrations of trying hard, provide some insight for teachers. Serious engagement, however, often lacks demonstrable forms. It is worth keeping in mind that the coding scale is designed to be based only on what is visible within the coding period.
3. Teachers who are familiar with the behaviour of individual students may be the best judges of student engagement. For instance, behaviour which may typically be considered evidence of low engagement (e.g. a student gazing out the window or a student doodling on a page) may be known by the teacher as that student's behaviour when engaged.

Suggestions

- Promote student ownership and include student interests, background knowledge and cultural understanding through negotiation of learning tasks. Negotiations can be open-ended or can allow the students choice or control regarding aspects such as the mode of presentation, topic, sequencing and pacing of the lesson, possible sources of information and assessment criteria.
- Challenge students and build success by appropriately structuring learning, e.g. scaffolding for students who need more support and designing open-ended tasks that enable a range of responses or a variety of pathways.
- Connect learning to what is meaningful and interesting to particular students, e.g. relate the significant ideas to, and include, people with expertise in the field, community events, issues or trends in popular or youth culture.
- Negotiate varied roles within groups to enhance inclusion and support for all students and joint ownership of tasks, such as in WebQuests.



2.3 High expectations

Description

Expectations are high when teachers (or students) communicate the expectation that all members of the class can learn important knowledge and skills that are challenging for them. Students are encouraged and recognised for taking conceptual or other risks in learning. Expectations are also high when students at all levels are expected, and try, to master challenging work whether the challenge is intellectual, physical or performance-based.

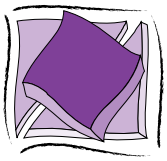
Expectations are low when little is asked of students in terms of conceptual challenge or risk taking. They are also low when teachers (or students) communicate that they do not expect some students to be able to do the work.

Coding scale

To what extent are high expectations of all students communicated? To what extent is conceptual risk taking encouraged and rewarded?

High expectations

1. No students, or only a few, participate in any challenging work.
2. Some students participate in challenging work during at least some of the lesson. They are encouraged (explicitly or through lesson processes) to try hard and to take risks and are recognised for doing so.
3. Many students participate in challenging work during at least half of the lesson. They are encouraged (explicitly or through lesson processes) to try hard and to take risks and are recognised for doing so.
4. Most students participate in challenging work during most of the lesson. They are encouraged (explicitly or through lesson processes) to try hard and to take risks and are recognised for doing so.
5. All students participate in challenging work throughout the lesson. They are encouraged (explicitly or through lesson processes) to try hard and to take risks and are recognised for doing so.

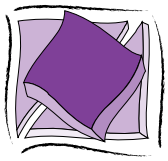


Notes

1. The coding scale for this element emphasises that the element of high expectations is not about how many students are **participating** in the lesson, but about how many students are participating in **challenging work**.
2. Teachers who view intelligence as dynamic and fluid, rather than static and unchanging, are less likely to have rigid preconceived notions about what students will or will not be able to achieve.
3. High expectations will not always be communicated explicitly in each lesson, especially when such expectations have previously been set. However, whether or not students are working toward high expectations should be evident.
4. When teachers and school leaders maintain high expectations, they encourage in students a desire to aim high rather than to merely get by. To expect less is to do students a disservice, not a favour.
5. Research has shown that teachers' expectations for students tend to be self-fulfilling. That is why Jere Brophy (1998, cited in the *Annotated Bibliography*, 2003) advises teachers to always treat students as enthusiastic learners, if they want them to become enthusiastic learners.

Suggestions

- Ask yourself: *What do I want the students to do to achieve deep understanding or to demonstrate their learning*? and *How well do I expect them to do it*?
- Refer to the standards articulated in the syllabus outcomes, content and stage statements, and in student work samples (if available), to develop a clear understanding of the expectations for the students' current stage, and for the stage beyond.
- Identify the prior learning of students and monitor their progress in order to support the development of appropriately challenging work for all students.
- Consider the goals and expectations the student and their families have for the student and incorporate these into plans for the student's learning.
- Reflect on and challenge your own assumptions and preconceptions about the capacities of individual students to engage in challenging work.



2.4 Social support

Description

Classrooms high in social support for student learning encourage all students to try hard and risk initial failure in a climate of mutual respect. Classrooms high in social support are characterised by teacher and student behaviours, comments and actions that encourage and value effort, participation, and the expression of one's views in the pursuit of learning. If disagreement or conflict occurs in the classroom, it is resolved in a constructive way for all concerned.

Classrooms low in social support are characterised by teacher or student behaviours, comments and actions that discourage effort, participation and taking risks to learn or express one's views. For example, teacher or student comments that belittle a student's response, and efforts by some students to prevent others from taking seriously an activity, serve to undermine support for learning. Social support can also be absent in a class when no overt acts like the above occur, but the overall atmosphere of the class is negative.

Coding scale

To what extent is there strong positive support for learning and mutual respect among teachers and students and others assisting students' learning? To what extent is the classroom free of negative personal comment or put-downs?

Social support

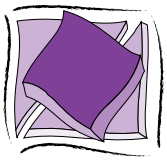
1. Social support is low. Actions or comments by the teacher or students result in "put-downs", and the classroom atmosphere is negative.

2. Social support is mixed. Both undermining and supportive behaviours or comments are observed.

3. Social support is neutral or mildly positive. While no undermining behaviours are observed, supportive behaviours or comments are directed at those students most engaged in the lesson, rather than those students who are more reluctant.

4. Social support is clearly positive. Supportive behaviours and comments are directed at most students, including clear attempts at supporting reluctant students.

5. Social support is strong. Supportive behaviours or comments from students and the teacher are directed at all students, including soliciting and valuing the contributions of all.

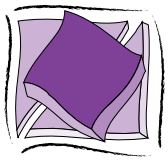


Notes

1. The teacher has the responsibility for setting the tone in the classroom by creating and maintaining a mutually respectful environment. The core business of the classroom is student learning, and this will be most productive in an atmosphere that is both supportive of students and supportive of their learning.
2. A behaviour in and of itself may be either negative or supportive, depending on the context and power dynamics within the particular classroom.

Suggestions

- Model language and behaviour which demonstrate respect for others' ideas, opinions and work.
- Teach skills in team work, consensus-building, active listening and positive feedback.
- Use strategies and structures which allow for all students to contribute and collaborate, e.g. cooperative learning, think-pair-share and jigsaw activities.
- Instil a sense of ownership and group solidarity which moderates classroom behaviour, for example by developing class rules in a collaborative fashion.
- Provide opportunities for you and your students to know, understand and value each other through discussions, multiple groupings, peer support networks and participation in community events.
- Design flexible learning tasks that will allow all students to experience success.
- Celebrate success in appropriate ways.
- Focus on the acknowledgement of appropriate behaviour, rather than on inappropriate behaviours.



2.5 Students' self-regulation

Description

High self-regulation is evident when the lesson proceeds without interruption and when students demonstrate autonomy and initiative in relation to their own behaviour in ways that allow the class to "get on" with learning. There is virtually no time spent, or need for time to be spent in the lesson, on disciplining students' behaviour or regulating student movements.

Low self-regulation is evident when teachers devote a substantial amount of classroom time to regulating and disciplining behaviour and movement, either in response to student misbehaviour, or through their own attention to behavioural matters.

Coding scale

To what extent do students demonstrate autonomy and initiative so that minimal attention to the disciplining and regulation of student behaviour is required?

Students' self-regulation

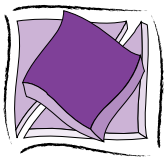
1. Few students demonstrate autonomy and initiative in regulating their own behaviour. Teachers devote more time to disciplining and regulating student behaviour than to teaching and learning.

2. Some students demonstrate autonomy and initiative in regulating their own behaviour, but there is still substantial interruption to the lesson for disciplinary and/or regulatory matters, as an attempt to avert poor behaviour, correct past behaviour or as an immediate reaction to poor student behaviour.

3. Many students demonstrate autonomy and initiative in regulating their own behaviour and the lesson proceeds coherently. However, teachers regulate behaviour several times, making statements about behaviour to the whole class, or perhaps focusing on students who are acting inappropriately.

4. Most students, most of the time, demonstrate autonomy and initiative in regulating their own behaviour and there is very little interruption to the lesson. Once or twice during the lesson, teacher comments on or correct student behaviour or movement.

5. All students, almost all of time, demonstrate autonomy and initiative in regulating their own behaviour and the lesson proceeds without interruption.

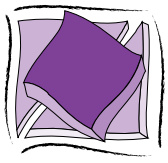


Notes

1. When students are self-regulated they:
   - understand and have internalised the standards of behaviour required in the class
   - have the maturity to meet those requirements without prompting, thus showing their **autonomy**
   - have an understanding of when it is appropriate to make and act on decisions about procedural matters in the classroom, thus showing their **initiative**.
2. A silent classroom is not necessarily a sign of high self-regulation, and conversely a noisy, active classroom may rate high on self-regulation if the students' activity and noise are associated with a particular learning experience.
3. The teacher–student relationship will have an effect on the degree of students' self-regulation. This relationship will be shaped by a host of factors, including the length of time the teacher has taught the class and the teacher's status and authority within the school community.

Suggestions

- Ensure activities are purposeful and interesting with clear goals that students perceive to be worthwhile.
- Provide adequate and relevant learning resources which offer students choice and the motivation to participate.
- Negotiate a shared understanding, expectation and acceptance of responsibilities and rights within the classroom, e.g. collaboratively develop a code of conduct, and provide choice and decision-making opportunities for students.
- Encourage student self-evaluation of progress and achievement on learning tasks.
- Ensure students understand the consequences of choices and of their behaviours.



2.6 Student direction

Description

Classrooms with high student direction see students exercising control over one or more of the following aspects of a lesson:

- **choice** of activities
- **time** spent on activities
- **pace** of the lesson
- **criteria** by which they will be assessed.

When students assume responsibility for the activities in which they engage, and/or how they complete them, the activities are likely to be student-centred (e.g. group work, individual research and practical investigation projects).

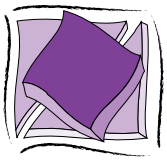
Classrooms with low student direction do not see students exercising control over class activities. Instead, the teacher explicitly determines what activities students do and how and when they are to do them. The nature and appropriateness of an activity is thus decided by the teacher.

Coding scale

To what extent do students exercise some direction over the selection of activities related to their learning and the means and manner by which these activities will be done?

Student direction

1. No evidence of student direction. All aspects of the lesson are explicitly designated by the teacher for students.
2. Low student direction. Although students exercise some control over some aspect of the lesson (choice, time, pace, assessment), their control is minimal or trivial.
3. Some student direction. Students exercise some control in relation to some significant aspects of the lesson.
4. Substantial student direction. Some deliberation or negotiation occurs between teacher and students over at least some significant aspects of the lesson.
5. High student direction. Students determine many significant aspects of the lesson either independent of, or dependent on, teacher approval.

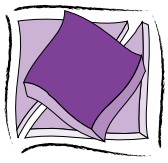


Notes

1. The element of student direction is not about teachers relinquishing their responsibility for students' learning. Rather this element acknowledges the importance of teachers providing opportunities for students to exercise control over one or more of four aspects:
   - **Choice** of activities: Students have opportunities to select from a range of activities, or to choose the topic or focus of an activity, or the way in which they might undertake an activity, the sources of information they may draw upon or the method of presentation.
   - **Time** spent on activities: Students exercise control over the time spent on activities when they can decide and negotiate how much time they require to complete an activity.
   - **Pace** of the lesson: Students exercise control over how quickly they complete their work.
   - **Criteria** by which they will be assessed: Students have opportunities to negotiate or contribute to determining the criteria by which they will be assessed.
2. Teachers will have different scope to provide opportunities for students to exercise control over these four aspects depending on the subject they are teaching or the stage of their students. For example, while teachers of HSC subjects may not have much latitude in determining the content and assessment criteria, there are still ways in which students can take responsibility for amounts of time dedicated to particular topics, overall pacing issues, or in deciding the form of learning activities and assessment tasks.

Suggestions

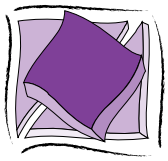
- Incorporate scaffolded choices within class learning activities, e.g. tiered activities with multiple entry and exit points, so that students can determine where they begin, and what challenges they can meet.
- Negotiate learning tasks and be open to ideas suggested by students for learning activities. Ask students: *What could we do to help us understand this*? *How could we go about learning this*? *What will we produce as a result of this learning*?
- In order to judge the appropriateness of providing students with opportunities to exercise control, teachers need to monitor and evaluate student participation in learning activities.
- Provide multiple pathways for students to demonstrate and teachers to assess learning outcomes, e.g. logbooks, presentations, performances, reflective journals, portfolios, models and online products.



Dimension 3: Significance

Significance refers to pedagogy that helps make learning more meaningful and important to students. Such pedagogy draws clear connections with students' prior knowledge and identities, with contexts outside of the classroom, and with multiple ways of knowing or cultural perspectives.

Elements
3.1 Background knowledge
3.2 Cultural knowledge
3.3 Knowledge integration
3.4 Inclusivity
3.5 Connectedness
3.6 Narrative



3.1 Background knowledge

Description

High background knowledge is evident when lessons provide students with opportunities (or they take opportunities) to make connections between their knowledge and experience and the substance of the lesson. Background knowledge may include prior school knowledge or it may include "out-of-school" knowledge, such as local knowledge, cultural knowledge, personal experience and knowledge of media and popular culture.

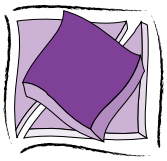
Low background knowledge is evident when lessons address new content, skills and competencies without any direct or explicit exploration of students' prior knowledge of the topic, and without any attempts by the teacher or students to provide relevant or key background knowledge that might enhance students' comprehension and understanding of the "new".

Coding scale

To what extent do lessons regularly and explicitly build from students' background knowledge, in terms of prior school knowledge, as well as other aspects of their personal lives?

Background knowledge

1. Students' background knowledge is not mentioned or elicited.
2. Students' background knowledge is mentioned or elicited, but is trivial and not connected to the substance of the lesson.
3. Students' background knowledge is mentioned or elicited briefly, is connected to the substance of the lesson, and there is at least some connection to out-of-school background knowledge.
4. Students' background knowledge is mentioned or elicited several times, is connected to the substance of the lesson, and there is at least some connection to out-of-school background knowledge.
5. Students' background knowledge is consistently incorporated into the lesson, and there is substantial connection to out-of-school background knowledge.

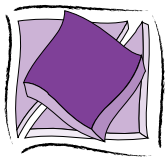


Notes

1. Students' background knowledge can come from just about anywhere—from their individual experiences, prior learning (in or out of school), knowledge from their own families and communities and from their experiences of work. The main focus of this element is whether or not the background knowledge of students in the class is valued and linked with the substance of the lesson.

Suggestions

- Identify and acknowledge background knowledge through assessing prior school knowledge, e.g. pre-testing, brainstorming to generate ideas about a topic, mind maps for describing what is known.
- Identify and acknowledge the out-of-school background knowledge of students by communicating with students' families and gaining familiarity with students' interests and the community in which they live.
- Use identified prior school knowledge and out-of-school background knowledge as a starting point for planning lessons and units of work.
- Incorporate background knowledge in learning activities through reference to family, community, previous experience and popular culture.



3.2 Cultural knowledge

Description

Cultural knowledge is high when there is an understanding, valuing and acceptance of the traditions, beliefs, skills, knowledge, languages, practices and protocols of diverse social groups. Cultural knowledge is high when the lesson recognises and values claims to knowledge from multiple social groups in an authentic, detailed and profound manner. Different social groupings are identified in relation to the dominant Australian culture and are distinguished by characteristics such as socioeconomic status, gender, ethnicity, race, age, sexuality, disability, language and religion.

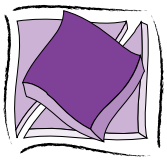
Cultural knowledge is low when there is little or no understanding, valuing and acceptance of the knowledge, skills and understandings of diverse social groups. Cultural knowledge is also low when it is used simply to compare social groups based on superficial characteristics.

Coding scale

To what extent do lessons regularly incorporate the cultural knowledge of diverse social groupings?

Cultural knowledge

1. No explicit recognition or valuing of other than the knowledge of the dominant culture is evident in the substance of the lesson.
2. Some cultural knowledge is evident in the lesson, but it is treated in a superficial manner.
3. Some cultural knowledge is recognised and valued in the lesson, but within the framework of the dominant culture.
4. Substantial cultural knowledge is recognised and valued in the lesson with some challenge to the framework of the dominant culture.
5. Substantial cultural knowledge is recognised and valued throughout the lesson and this knowledge is accepted as equal to the dominant culture.

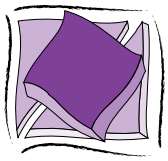


Notes

1. The element of cultural knowledge concerns the recognition and valuing of the **knowledge** of different social groups, whereas the element of inclusivity refers specifically to recognising and valuing **students** from diverse social groups in the class.
2. Cultural knowledge defines features of social groups which people sometimes use to identify themselves as part of a particular social group. While some social groups experience prejudice and disadvantage, cultural knowledge is not an indicator of disadvantage, but rather a valuable resource upon which teachers can build learning. For example, the inclusion of Aboriginal cultural knowledge in KLAs and subjects strengthens the understanding by all students that social groups represent knowledge in different rather than "lesser" ways.
3. The term "culture" is used here in a broad sense to include markers of cultural difference within Australian society. In this sense, it would be possible to consider more groups than those listed above as being sources of cultural knowledge. For example, people living with HIV have developed a unique knowledge of Australia and its institutions that is recognisable as cultural knowledge.
4. There are different opportunities to incorporate cultural knowledge within KLAs and subjects. Tokenistic or contrived inclusions of cultural knowledge should be avoided as they can be self-defeating. However, there are times when recognition of the cultural origins of knowledge can be legitimately incorporated in order to strengthen the substance of the lesson.

Suggestions

- Develop an understanding of diversity by using a range of resources (human and material) within and across social groups. Where they are available, use the resources endorsed by social groups.
- Consider how learning resources reflect and value diversity and include the practices and protocols of social groups.
- Where appropriate, include members of the community from diverse cultural backgrounds as a resource in lessons. Incorporate practices and events of local communities.
- Provide opportunities for students to look beyond stereotypes used to describe different social groups.



3.3 Knowledge integration

Description

High knowledge integration is identifiable when meaningful connections are made between different topics and/or between different subjects. For instance, when students address themes or problems which require knowledge from multiple topics or subject areas, knowledge integration will be high.

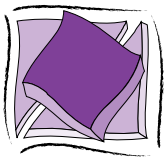
Low knowledge integration is identifiable when no meaningful connections are made between different topics and/or between different subjects. In the extreme, strong subject boundaries can prevent or "get in the way of" student learning because opportunities to make meaningful connections are missed.

Coding scale

To what extent do lessons regularly demonstrate links between and within subjects and key learning areas?

Knowledge integration

1. No meaningful connections. All knowledge is strictly restricted to that explicitly defined within a single topic or subject area.
2. Some minor or trivial connections are made. Knowledge is mostly restricted to that of a specific topic or subject area.
3. At least one meaningful connection is made between topics or subject areas by the teacher and/or the students during the lesson.
4. Several meaningful connections are made between topics or subject areas by the teacher and/or the students during the lesson.
5. Meaningful connections are regularly made between topics or subject areas by the teacher and/or the students during the lesson.

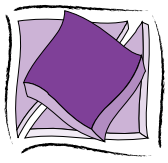


Notes

1. It is important to recognise that the element of knowledge integration assumes that teachers will be building from different disciplinary bases. To say that meaningful connections are made between subject areas implies that subject knowledge must be present. That is, while integration of subjects is a means for developing significance, it is important not to lose sight of just what is being integrated. Integration of knowledge, understandings and skills from other subject areas will enhance learning **only if** it contributes to the deep understanding of core concepts.
2. Thematic or problem-based curricula do not necessarily produce knowledge integration. They can result in a series of loosely collected activities which neither deepen the understanding of particular subjects, nor illuminate the connections between them.
3. The mandates of cross-curriculum perspectives and policies such as Aboriginal education, multicultural education, gender equity, environmental education, literacy and numeracy, provide explicit contexts in which knowledge integration can be explored.
4. To see evidence of meaningful connections within a subject or KLA may require a depth of specialist knowledge of the subject or KLA on the part of the observer. While this may sometimes be true of all elements, it is particularly so when coding for knowledge integration (and for deep understanding).

Suggestions

- Plan to make explicit the connections between topics within a KLA or subject using themes or large problems where they can strengthen the learning of key concepts.
- Plan an integrated unit of work using identified syllabus outcomes from more than one KLA or subject, where appropriate. This would involve identifying the significant concepts of each syllabus and ensuring students are provided with opportunities to demonstrate achievement of all identified syllabus outcomes.
- Plan and/or teach collaboratively units of work and learning activities in cross-KLA teams, e.g. map common outcomes across KLAs in a stage to promote links between subjects or lessons.



3.4 Inclusivity

Description

High inclusivity is evident when all students in the classroom, from all cultural or social backgrounds, participate in the public work of the class and when their contributions are taken seriously and valued. High inclusivity is evident when the classroom is free from negative forms of prejudice and discrimination, and thus all individuals, regardless of their social grouping, feel encouraged to participate fully in the lesson.

Low inclusivity is evident when students from a particular group are excluded (or exclude themselves) from class activities, such as asking and answering questions and participating in discussions, demonstrations or group work. Low inclusivity is also evident when the genuine contributions of some students are devalued.

Coding scale

To what extent do lessons include and publicly value the participation of all students across the social and cultural backgrounds represented in the classroom?

Inclusivity

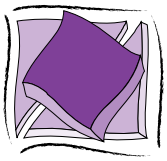
1. Some students are excluded, or exclude themselves, from lesson activities throughout the lesson.

2. Some students are excluded, or exclude themselves, from the majority of lesson activities except for minor forms of inclusion in one or two instances during a lesson.

3. Students from all groups are included in most aspects of the lesson, but the inclusion of students from some groups may be minor or trivial relative to other groups.

4. Students from all groups are included in a significant way in most aspects of the lesson, but there still appears to be some unevenness in the inclusion of different social groups.

5. Students from all groups are included in all aspects of the lesson and their inclusion is both significant and equivalent to the inclusion of students from other social groups.

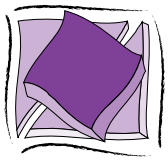


Notes

1. The element of inclusivity refers specifically to recognising and valuing **students** from diverse social groups who are actually in the class, whereas cultural knowledge concerns the recognition and valuing of the **knowledge** of social groups which may or may not be represented in the class.
2. The focus of the coding scale for this element is on the extent and degree of participation of students in a class, particularly those from social and cultural backgrounds recognised as being educationally or socially disadvantaged in Australian society. As with the element of cultural knowledge, these groups include those identified by socioeconomic class, gender, ethnicity, race, age, sexuality, disability, language and religion.
3. Active self-exclusion, such as not turning up to class or school, is a major issue, but difficult to address using this classroom practice tool. However, if the observer knows that only 15 out of 25 students attending class is a common occurrence, this could indicate that the missing students feel excluded by aspects of the classroom or the school.
4. While coding this element, it may be difficult to note the subtle ways in which a specific group is excluded without planning more detailed observation strategies beforehand. For example, to determine if gender is an issue in a classroom, the observer may need to note specific instances of the different treatment of boys and girls in a systematic way throughout the lesson.

Suggestions

- Know and value the social and cultural backgrounds of the students in your class.
- Make greater use of the cultural knowledge of the groups represented in the class in the design and development of learning activities.
- Encourage students to examine the concepts of "inclusion" and "exclusion" themselves, particularly when they are embarking on group projects and group work.
- Reflect on and consider ways of including those students who are passively disengaged in the public work of the class.
- Create opportunities for all students to experience the range of classroom roles in learning activities by using strategies such as home group-expert group, think-pair-share, group roles (e.g. leader, recorder, speaker) and cooperative learning strategies.



3.5 Connectedness

Description

High connectedness is evident when learning has value and meaning beyond the classroom and school. Lessons exhibit high connectedness through addressing either a public problem or actual experiences or situations that students will confront. High connectedness is also evident when there are attempts to interact with an audience beyond the classroom by communicating knowledge to others (including within the school), advocating solutions to social problems, providing assistance to people, or creating performances or products and exploring their utilitarian or aesthetic value.

In a class with little or no connectedness, activities are deemed important for success only in school (now or later), but for no other aspects of life. Student work has no impact on others and serves only to certify their level of competence or compliance with the norms and routines of formal schooling.

Coding scale

To what extent do lesson activities rely on the application of school knowledge in real-life contexts or problems? To what extent do lesson activities provide opportunities for students to share their work with audiences beyond the classroom and school?

Connectedness

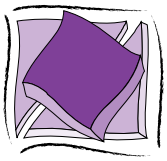
① The lesson has no clear connection to anything beyond itself. Neither the teacher nor the students offer any justification for the lesson beyond the school.

② The teacher or students try to connect what is being learned to the world beyond the classroom, but the connection is weak and superficial or trivial.

③ Students recognise some connection between classroom knowledge and situations outside the classroom, which might include sharing their work with an audience outside the classroom, but they do not explore implications of these connections which remain largely abstract or hypothetical.

④ Students recognise and explore connections between classroom knowledge and situations outside the classroom in ways that create personal meaning and highlight the significance of the knowledge. There might be an effort to influence an audience beyond the classroom.

⑤ Students recognise and explore connections between classroom knowledge and situations outside the classroom in ways that create personal meaning and highlight the significance of the knowledge. This meaning and significance is strong enough to lead students to become involved in an effort to influence an audience beyond the classroom.



Notes

1. Connectedness is higher when students not only share their work with an audience beyond the classroom and the school, but explore the meaning and significance of having that audience or the meaning of their work for that audience.
2. Influencing an audience beyond the classroom does not mean simply exhibiting students' work outside the classroom. Authentic examples of influencing an audience include: writing letters to the school principal, editors of papers or Government representatives; presenting submissions and reports to local government or senate inquiries; and undertaking community projects such as environmental recycling projects, or designing health promotion programs for members of the local school community.

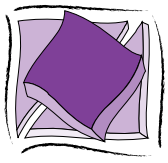
Suggestions

- Ask questions of students such as:

  When would you need to know this?

  Why are we studying this?

  Who might be an appropriate audience for our work?
- Make explicit and have students explore the link between their context and significant concepts being investigated.
- When possible, select topics more readily applied to contexts outside of school.
- Link learning to and encourage discussion about current issues in the local community, media or popular culture.
- Incorporate resources beyond the classroom such as field experts, Internet searches, local community people and resources, and the media.



3.6 Narrative

Description

Use of narrative is high when the stories written, told, read, viewed or listened to help illustrate or bring to life the knowledge that students are addressing in the classroom. Narratives may include personal stories, biographies, historical accounts, case studies, literary and cultural texts and performances. Narrative does not increase significance if the stories used are unconnected to the substance of the lesson or unproductive in terms of student learning. Narrative may be high if there is only one narrative present in the lesson as long as that narrative enhances the significance of the substance of the lesson.

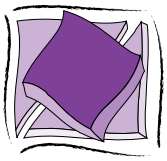
Use of narrative is low when no stories are used in the lesson or when the stories used are disconnected to the substance of the lesson. Use of narrative will also be low if stories are used in ways that detract from the substance of the lesson.

Coding scale

To what extent do lessons employ narrative to enrich student understanding?

Narrative

1. Either narrative is used at no point in the lesson, or the narratives used are disconnected or detract from the substance of the lesson.
2. Narrative is used on occasion as a minor part of the lesson and/or is loosely connected to the substance of the lesson.
3. Narrative is used at several points in the lesson to enhance the significance of the substance of the lesson.
4. Narrative is used for a substantial portion of the lesson to enhance the significance of the substance of the lesson.
5. Narrative is used throughout the lesson to enhance the significance of the substance of the lesson.

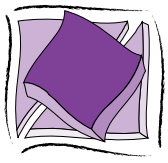


Notes

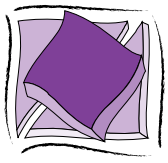
1. Lessons can employ narrative as **content** (e.g. when students are reading or listening to stories) or as **process** (e.g. when students are writing or telling stories).
2. The use of "narrative" as a label for this element differs from the use of the term "narrative" as a text type. When used to define a text type, narrative refers to the structures and functions of a particular use of language. As used here, narrative refers broadly to the use of stories to help bring alive the substance of the lesson.
3. Narrative is a powerful tool for learning when used by either the teacher or students. Teachers and/or students can provide a narrative that aptly illustrates a key concept of the lesson and which can be referred to throughout the lesson. Students can demonstrate their understanding by structuring their own experiences or newly acquired knowledge in a narrative form. To be significant, however, the narrative must connect to and support the key concepts of the lesson.
4. Encouraging the use of relevant personal experience or imagined story can assist those students who are less skilled in using abstract constructs to demonstrate their understanding.

Suggestions

- Recognise and use multiple sources of stories such as histories, biographies, autobiographies, documentaries, personal accounts, case studies, field reports and guest speakers, where appropriate and related to the substance of the lesson.
- Plan a variety of opportunities for students to construct their own stories related to the substance of the lesson, e.g. journal writing, diary entries, reflective journals, portfolios, email, chat room, scenarios, case studies and performances.



Appendix



Coding sheets

Two sample coding sheets are provided that can be used to record the scores for each element following an observation or review of classroom practice.

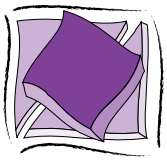
The first coding sheet allows you to record your score by circling a number from 1 to 5. When using this sheet you may find it useful to jot down any evidence of what you see during the coding period on the back of the sheet or on a separate piece of paper.

The second coding sheet provides space for you to record any evidence of what you see during the coding period and then write in your score.

In using both coding sheets you would only determine your score after referring to the coding scales in this guide.

Coding scale overview

The final three pages display an overview of the coding scales related to each of the three dimensions. They are provided for ease of reference, but are best used once you have developed a deep understanding of each of the elements in this guide.



Coding sheet

Stage/Year: _____ KLA/Subject: _____

Unit/Lesson: _____

Intellectual quality

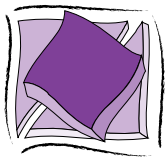
1.1	Deep knowledge	1	2	3	4	5
1.2	Deep understanding	1	2	3	4	5
1.3	Problematic knowledge	1	2	3	4	5
1.4	Higher-order thinking	1	2	3	4	5
1.5	Metalanguage	1	2	3	4	5
1.6	Substantive communication	1	2	3	4	5

Quality learning environment

2.1	Explicit quality criteria	1	2	3	4	5
2.2	Engagement	1	2	3	4	5
2.3	High expectations	1	2	3	4	5
2.4	Social support	1	2	3	4	5
2.5	Students' self-regulation	1	2	3	4	5
2.6	Student direction	1	2	3	4	5

Significance

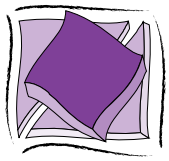
3.1	Background knowledge	1	2	3	4	5
3.2	Cultural knowledge	1	2	3	4	5
3.3	Knowledge integration	1	2	3	4	5
3.4	Inclusivity	1	2	3	4	5
3.5	Connectedness	1	2	3	4	5
3.6	Narrative	1	2	3	4	5



Coding sheet

Stage/Year: _____ KLA/Subject:_____Unit/Lesson:_____

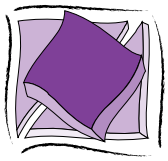
Element	Evidence: Coding notes	Score
1.1 Deep knowledge		
1.2 Deep understanding		
1.3 Problematic knowledge		
1.4 Higher-order thinking		
1.5 Metalanguage		
1.6 Substantive communication		
2.1 Explicit quality criteria		
2.2 Engagement		
2.3 High expectations		
2.4 Social support		
2.5 Students' self-regulation		
2.6 Student direction		
3.1 Background knowledge		
3.2 Cultural knowledge		
3.3 Knowledge integration		
3.4 Inclusivity		
3.5 Connectedness		
3.6 Narrative		



Coding scale overview

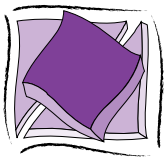
Intellectual quality

Deep knowledge	1 Almost all of the content knowledge of the lesson is shallow because it does not deal with significant concepts or ideas.	2 Some key concepts and ideas are mentioned or covered by the teacher or students, but only at a superficial level.	3 Knowledge is treated unevenly during instruction. A significant idea may be addressed as part of the lesson, but in general the focus on key concepts and ideas is not sustained throughout the lesson.	4 Most of the content knowledge of the lesson is deep. Sustained focus on central concepts or ideas is occasionally interrupted by superficial or unrelated ideas or concepts.	5 Knowledge is deep because focus is sustained on key ideas or concepts throughout the lesson.
Deep understanding	1 Students demonstrate only shallow understanding.	2 For most students, understanding is shallow during most of the lesson, with one or two minor exceptions.	3 Deep understanding is uneven. Students demonstrate both shallow and deeper understanding at different points in the lesson. A central concept understood by some students may not be understood by other students.	4 Most students provide information, arguments or reasoning that demonstrates deep understanding for a substantial portion of the lesson.	5 Almost all students demonstrate deep understanding throughout the lesson.
Problematic knowledge	1 All knowledge is presented only as fact and not open to question.	2 Some knowledge is treated as open to multiple perspectives.	3 Knowledge is treated as open to multiple perspectives, seen as socially constructed and therefore open to question.	4 Knowledge is seen as socially constructed and multiple perspectives are not only presented, but are explored through questioning of their basic assumptions.	5 Knowledge is seen as socially constructed, with multiple and/or conflicting interpretations presented and explored to an extent that a judgement is made about the appropriateness of an interpretation in a given context.
Higher-order thinking	1 Students demonstrate only lower-order thinking. They either receive or recite pre-specified knowledge or participate in routine practice, and in no activities during the lesson do students go beyond simple reproduction of knowledge.	2 Students primarily demonstrate lower-order thinking, but at some point, at least some students perform higher-order thinking as a minor diversion within the lesson.	3 Students primarily demonstrate routine lower-order thinking a good share of the lesson. There is at least one significant question or activity in which most students perform some higher-order thinking.	4 Most students demonstrate higher-order thinking in at least one major activity that occupies a substantial portion of the lesson.	5 All students, almost all of the time, demonstrate higher-order thinking.
Metalanguage	1 No metalanguage. The lesson proceeds without the teacher or students stopping to comment on the language being used.	2 Low metalanguage. During the lesson terminology is explained or either the teacher or students stop to make value judgements or comment on language. There is, however, no clarification or assistance provided regarding the language.	3 Some use of metalanguage. At the beginning of the lesson, or at some key juncture, the teacher or students stop and explain or conduct a "mini-lesson" on some aspect of language, e.g. genre, vocabulary, signs or symbols.	4 Periodic use of metalanguage. The teacher or students provide commentary on aspects of language at several points during the lesson.	5 High use of metalanguage. The lesson proceeds with frequent commentary on language use.
Substantive communication	1 Almost no substantive communication occurs during the lesson.	2 Substantive communication among students and/or between teacher and students occurs briefly.	3 Substantive communication among students and/or between teacher and students occurs occasionally and involves at least two sustained interactions.	4 Substantive communication, with sustained interactions, occurs over approximately half the lesson with teacher and/or students scaffolding the conversation.	5 Substantive communication, with sustained interactions, occurs throughout the lesson, with teachers and/or students scaffolding the communication.



Quality learning environment

	1	2	3	4	5
Explicit quality criteria	No explicit statements regarding the quality of work are made. Only technical and procedural criteria are made explicit.	Only general statements are made regarding the desired quality of the work.	Detailed criteria regarding the quality of work are made explicit during the lesson, but there is no evidence that students are using the criteria to examine the quality of their work.	Detailed criteria regarding the quality of work are made explicit or reinforced during the lesson and there is evidence of some students, some of the time, examining the quality of their work in relation to these criteria.	Detailed criteria regarding the quality of work are made explicit or reinforced throughout the lesson and there is consistent evidence of students examining the quality of their work in relation to these criteria.
Engagement	Low engagement or disengagement. Students are frequently off-task, perhaps disruptive, as evidenced by inattentiveness or serious disruptions by many. This is the central characteristic during much of the lesson.	Sporadic engagement. Most students, most of the time, either appear apathetic and indifferent or are only occasionally active in carrying out assigned activities. Some students might be clearly off-task.	Variable engagement. Most students are seriously engaged in parts of the lesson, but may appear indifferent during other parts and very few students are clearly off-task.	Widespread engagement. Most students, most of the time, are on-task pursuing the substance of the lesson. Most students seem to be taking the work seriously and trying hard.	Serious engagement. All students are deeply involved, almost all of the time, in pursuing the substance of the lesson.
High expectations	No students, or only a few, participate in any challenging work.	Some students participate in challenging work during at least some of the lesson. They are encouraged (explicitly or through lesson processes) to try hard and to take risks and are recognised for doing so.	Many students participate in challenging work during at least half of the lesson. They are encouraged (explicitly or through lesson processes) to try hard and to take risks and are recognised for doing so.	Most students participate in challenging work during most of the lesson. They are encouraged (explicitly or through lesson processes) to try hard and to take risks and are recognised for doing so.	All students participate in challenging work throughout the lesson. They are encouraged (explicitly or through lesson processes) to try hard and to take risks and are recognised for doing so.
Social support	Social support is low. Actions or comments by the teacher or students result in "put-downs", and the classroom atmosphere is negative.	Social support is mixed. Both undermining and supportive behaviours or comments are observed.	Social support is neutral or mildly positive. While no undermining behaviours are observed, supportive behaviours or comments are directed at those students most engaged in the lesson, rather than those students who are more reluctant.	Social support is clearly positive. Supportive behaviours and comments are directed at most students, including clear attempts at supporting reluctant students.	Social support is strong. Supportive behaviours or comments from students and the teacher are directed at all students, including soliciting and valuing the contributions of all.
Students' self-regulation	Few students demonstrate autonomy and initiative in regulating their own behaviour. Teachers devote more time to disciplining and regulating student behaviour than to teaching and learning.	Some students demonstrate autonomy and initiative in regulating their own behaviour, but there is still substantial interruption to the lesson for disciplinary and/or regulatory matters, as an attempt to avert poor behaviour, correct past behaviour or as an immediate reaction to poor student behaviour.	Many students demonstrate autonomy and initiative in regulating their own behaviour and the lesson proceeds coherently. However, teachers regulate behaviour several times, making statements about behaviour to the whole class, or perhaps focusing on students who are acting inappropriately.	Most students, most of the time, demonstrate autonomy and initiative in regulating their own behaviour and there is very little interruption to the lesson. Once or twice during the lesson, teacher comments on or correct student behaviour or movement.	All students, almost all of time, demonstrate autonomy and initiative in regulating their own behaviour and the lesson proceeds without interruption.
Student direction	No evidence of student direction. All aspects of the lesson are explicitly designated by the teacher for students.	Low student direction. Although students exercise some control over some aspect of the lesson (choice, time, pace, assessment), their control is minimal or trivial.	Some student direction. Students exercise some control in relation to some significant aspects of the lesson.	Substantial student direction. Some deliberation or negotiation occurs between teacher and students over at least some significant aspects of the lesson.	High student direction. Students determine many significant aspects of the lesson either independent of, or dependent on, teacher approval.



Significance

	1	2	3	4	5
Background knowledge	Students' background knowledge is not mentioned or elicited.	Students' background knowledge is mentioned or elicited, but is trivial and not connected to the substance of the lesson.	Students' background knowledge is mentioned or elicited briefly, is connected to the substance of the lesson, and there is at least some connection to out-of-school background knowledge.	Students' background knowledge is mentioned or elicited several times, is connected to the substance of the lesson, and there is at least some connection to out-of-school background knowledge.	Students' background knowledge is consistently incorporated into the lesson, and there is substantial connection to out-of-school background knowledge.
Cultural knowledge	No explicit recognition or valuing of other than the knowledge of the dominant culture is evident in the substance of the lesson.	Some cultural knowledge is evident in the lesson, but it is treated in a superficial manner.	Some cultural knowledge is recognised and valued in the lesson, but within the framework of the dominant culture.	Substantial cultural knowledge is recognised and valued in the lesson with some challenge to the framework of the dominant culture.	Substantial cultural knowledge is recognised and valued throughout the lesson and this knowledge is accepted as equal to the dominant culture.
Knowledge integration	No meaningful connections. All knowledge is strictly restricted to that explicitly defined within a single topic or subject area.	Some minor or trivial connections are made. Knowledge is mostly restricted to that of a specific topic or subject area.	At least one meaningful connection is made between topics or subject areas by the teacher and/or the students during the lesson.	Several meaningful connections are made between topics or subject areas by the teacher and/or the students during the lesson.	Meaningful connections are regularly made between topics or subject areas by the teacher and/or the students during the lesson.
Inclusivity	Some students are excluded, or exclude themselves, from lesson activities throughout the lesson.	Some students are excluded, or exclude themselves, from the majority of lesson activities except for minor forms of inclusion in one or two instances during a lesson.	Students from all groups are included in most aspects of the lesson, but the inclusion of students from some groups may be minor or trivial relative to other groups.	Students from all groups are included in a significant way in most aspects of the lesson, but there still appears to be some unevenness in the inclusion of different social groups.	Students from all groups are included in all aspects of the lesson and their inclusion is both significant and equivalent to the inclusion of students from other social groups.
Connectedness	The lesson has no clear connection to anything beyond itself. Neither the teacher nor the students offer any justification for the lesson beyond the school.	The teacher or students try to connect what is being learned to the world beyond the classroom, but the connection is weak and superficial or trivial.	Students recognise some connection between classroom knowledge and situations outside the classroom, which might include sharing their work with an audience outside the classroom, but they do not explore implications of these connections which remain largely abstract or hypothetical.	Students recognise and explore connections between classroom knowledge and situations outside the classroom in ways that create personal meaning and highlight the significance of the knowledge. There might be an effort to influence an audience beyond the classroom.	Students recognise and explore connections between classroom knowledge and situations outside the classroom in ways that create personal meaning and highlight the significance of the knowledge. This meaning and significance is strong enough to lead students to become involved in an effort to influence an audience beyond the classroom.
Narrative	Either narrative is used at no point in the lesson, or the narratives used are disconnected or detract from the substance of the lesson.	Narrative is used on occasion as a minor part of the lesson and/or is loosely connected to the substance of the lesson.	Narrative is used at several points in the lesson to enhance the significance of the substance of the lesson.	Narrative is used for a substantial portion of the lesson to enhance the significance of the substance of the lesson.	Narrative is used throughout the lesson to enhance the significance of the substance of the lesson.