

'TYPICAL HSIE PEDAGOGY' - QUALITY TEACHING IN NSW HSIE CLASSROOMS

Ken Edge, Ruth Reynolds, Mitch O'Toole

School of Education, The University of Newcastle, Australia

Abstract

This paper presents the findings of a research study that assessed the variation in teaching in expert teachers' Stage 4/5 History and Geography classrooms in one region in NSW. The specificity of the analysis made possible by the New South Wales Department of Education *Quality Teaching* model (NSWQTM) and associated research instruments enabled a number of insights to be drawn about the teaching in these classrooms. After observation and coding of 61 weekly lessons the general qualities of pedagogy as described by NSWQTM were not high. The identification of a 'typical HSIE pedagogy' was a major contribution of this study to research. Overall, the expert HSIE teachers in this study appeared to be 'teaching defensively' (by analogy with 'driving defensively') or 'playing it safe'. These findings have implications for policy makers about what is needed for the NSWQTM and for good teaching in general, to become part of day-to-day classrooms and practice.

1. Introduction

In the broader societal context education and schooling in general are contested notions (Bernstein, 1971a, 1971b, 1975, 1973; Bourdieu, 1971; Freire, 1972; Goodlad, 1984; Illich, 1993) and subject to various philosophical stances on purpose, validity and outcomes. However, within the life of the participants in schooling the discussions are more pragmatic. One key issue in schools is the extent of the impact of the teacher on the teaching.

Within in the literature there are ongoing debates about the relative influence of teachers and teaching. In the early school effectiveness research the consensus was that school effects had minimal impact on students' learning outcomes and that ethnic and family socio-economic status (SES) background factors constituted the dominant determinants of students' educational outcomes (Coleman et al., 1966; Creemers & Scheerens, 1994; Jencks et al., 1972; Plowden Committee, 1967). While the findings from these early studies seem to cast serious doubts on the capacity of schools in Australia to make a difference, there now seems to be a broad agreement that the quality of teaching is a decisive factor in determining student achievement (Alton-Lee, 2003; Ayres, Sawyer, & Dinham, 2004; Cuttance, 2001; Fenstermacher & Richardson, 2005; Hattie, 2003; Ladwig, 2005; Rowe, 2003).

To improve teaching there is a need to understand the characteristics of a quality teacher and what quality teaching or good teaching looks like. There are many characteristics and definitions of a quality teacher and quality teaching and critiques of some of the check lists of best practice. While these lists provide guidance, instructional leaders and researchers are now measuring the quality of classroom teaching using more holistic models of pedagogy. These models include the uni-dimensional *Authentic Pedagogy* model (Newmann & Associates, 1996a; Newmann, King, & Secada, 1996b), multi-dimensional models in *Productive Pedagogy* (Ladwig, 2007; Queensland School Reform Longitudinal Study, 2001) and as the model of choice for the current research study the NSW *Quality Teaching* Model (New South Wales Department of Education & Training, 2003a, 2003b, 2003c, 2003d, 2003e).

Before moving into a discussion about the research findings presented in this paper a brief summary of what the New South Wales Department of Education (NSWDET) *Quality Teaching* model (NSWQTM) looks like would be useful. The NSWQTM incorporates a pedagogy that is characterised by three dimensions and eighteen elements that constitute good classroom practice based on strong research carried out in a broad range of real classrooms. The New South Wales Department of Education and Training: *Quality teaching in NSW public schools: A classroom practice guide* (New South Wales Department of Education & Training, 2003d) provides descriptions of these dimensions

and the 18 item rating scales for observing classroom practices.

The **Intellectual Quality** dimension is central to the NSWQTM and is the dimension that has survived essentially unchanged from the original work on Authentic Pedagogy. Such pedagogy focuses on producing *deep understanding* of important, substantive concepts, skills and ideas, treats knowledge as something that requires active construction, requires students to engage in *higher order thinking* and to communicate substantially about their learning. In developing a **Quality Learning Environment** students and teachers need to work productively to set high and explicit expectations and where the focus is clearly on learning. In creating **Significance** teachers need to make clear connections with contexts outside of the classroom and students' prior knowledge and identities, including cultural perspectives. Creating **Significance** helps to make learning more meaningful for students. For classroom practices purposes, the pedagogy is described through 18 more detailed elements (see Table 1).

Table 1 - The Dimensions and Elements of the NSWQTM

<i>Intellectual Quality</i>	<i>Quality Learning Environment</i>	<i>Significance</i>
Deep knowledge	Explicit quality	Background knowledge
Deep understanding	Engagement	Cultural knowledge
Problematic knowledge	High expectations	Knowledge integration
High-order thinking	Social support	Inclusivity
Metalanguage	Students' self-regulation	Connectedness
Substantive communication	Student direction	Narrative

2. Research Design

The research design of this study was distinctive. This study was based on classroom observations. The NSWQTM was used as a tool to assess the variation in teaching exhibited in eight teachers' Stage 4/5 History and Geography classrooms from five NSW public secondary schools. The participants were expert teachers, with five of the eight who volunteered Head Teachers HSIE, one was relieving a Head Teacher HSIE for over twelve months and the other two participants were experienced classroom teachers. Of the five schools in the study, three schools had two teacher participants, with one HSIE teacher from each of the other schools represented. Where the schools had two teachers in the study, one taught Geography and the other History; there were two teachers who taught Stage 4 Geography; one teacher who taught Stage 4 History; there were three teachers who taught Stage 5 Geography and two teachers who taught Stage 5 History.

Classroom observation data relating to these single teacher class-cohorts was gathered repeatedly over a 10 week period by direct observation on a weekly basis, one observation per week with the same class, same teacher (n=61). The instruments used to assess the quality of pedagogy were already developed in the document; *Quality Teaching in NSW public schools: A classroom practice guide* (New South Wales Department of Education & Training, 2003d). The item rating scales (ordinal scales scored on 1-5 Likert scale) allowed the researchers to make distinctions based on whether or not the quality in question is observed, how many students were engaged in that manner, and for how much of the lesson (Ladwig, 2005).

For analysis purposes the dimensional constructs had a theoretical mid-point of 18 within the observable range of 6 to 30. For the elements, with a rating scale between 1 and 5, the theoretical mid-point was 3. To assess the relative importance of each of the 6 elements for each of the three dimensional constructs they are grouped into four categories. That is, elements with observational scores between 4 and 5 are described as 'high-range'; observational scores between 3 and 4 are described as 'mid-range'; elements with observational scores between 2 and 3 are described as 'low mid-range' and observation scores between 1 and 2 are in the 'low-range'.

While alternate international and Australian studies available were also longitudinal in design they focused on single-point-in-time data collection with no studies undertaking data collection in a single classroom repeatedly over time. This study is also significant as it was the earliest piece of quantitative research investigating pedagogy in NSW public secondary schools using the NSWQTM. The only

other study conducted, titled 'Systemic Implications of Pedagogy and Achievement in NSW Public Schools' (SIPA) was undertaken between 2004 and 2007 and involved a major collaboration between the NSWDET and university researchers (Amosa & Cooper, 2006; Gore & Ladwig, 2006a, 2006b; Gore, Ladwig, Amosa, & Griffiths, 2008; Griffiths, Gore, & Ladwig, 2006). The field work for the current investigation was undertaken in 2004, preceded the SIPA study and provided some guidance for it in terms of research methodology and clarification of key ideas as a result of the study.

3. Research Findings

The identification of a 'typical HSIE pedagogy' was a significant contribution to the research in the field. The 'typical HSIE pedagogy' describes what these HSIE teachers decided from day-to-day and sometimes from moment to moment on how to best present new knowledge, review old knowledge, make decisions on how to teach the knowledge, the variety strategies to be used, how to coordinate questions from students and how to negotiate the transitions from one topic to another. In identifying the 'typical HSIE pedagogy' each of the element scores were matched (as best as possible) to the coding descriptors from *Quality teaching in NSW public schools: A classroom practice guide* (New South Wales Department of Education & Training, 2003d). The findings are presented in Sections 3.1 to 3.3.

3.1 Intellectual Quality in the Stage 4/5 HSIE Classrooms

The score for the **Intellectual Quality** dimension (mean = 14.67, sd = 2.27) was well below the theoretical mid-point (18). The small group standard deviation for **Intellectual Quality** indicates that the pedagogy observed didn't vary much from lesson to lesson. From the descriptive statistics presented in Table 2 there were no elements that scored in the high-range with only one element, *deep knowledge* scoring in the mid-range. Three elements, *deep understanding*, *higher-order thinking* and *substantive communication* scored in low mid-range. The low-range scoring elements were *problematic knowledge* and *metalanguage*.

Table 2 Intellectual Quality

Elements (n=61)	Mean (SD)	'Typical HSIE Pedagogy'
Intellectual Quality	14.67 (2.27)	
Deep knowledge	3.23 (.529)	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.
Deep understanding	2.74 (.575)	Deep understanding is uneven. Students demonstrate both shallow and a deeper understanding at different points during the lesson. A central concept is understood by some students, but may not be understood by other students.
Problematic knowledge	1.92 (.802)	Knowledge is mostly presented as fact, or as a body of truth to be acquired by students. Knowledge is treated as static and open to only one interpretation.
High-order thinking	2.16 (.688)	Students are primarily involved in routine lower-order thinking, but at some point during a lesson, at least some students perform higher-order thinking as a minor diversion.
Metalanguage	2.10 (.597)	During lessons terminology is explained, however, neither the teacher nor the students stop to make judgements or comments on the language. There is no clarification or assistance provided regarding the language.
Substantive communication	2.52 (.595)	Substantive communication among students and/or between the teacher and the students occurs only occasionally and involves at least two sustained interactions. Discussion follows a typical 'initiate-respond-evaluate' or IRE pattern with low level recall.

The 'typical HSIE pedagogy' portrayed in the **Intellectual Quality** dimension indicated that the *deep knowledge* of lessons was treated not as problematic, but as a fixed, static body of information

and not in a problematic manner. The observed frequency of their classroom use indicated that textbooks defined this knowledge in support of completion of the content of the centrally mandated syllabi (New South Wales Board of Studies, 2003a, 2003b). While terminology was explained the emphasis was primarily on activities involving lower-order thinking with limited time or opportunities to question the function and structure of the specialist language presented. In exploring and developing student *deep understanding* communication in lessons typically developed around initiate-respond-evaluate (IRE) patterns with the teacher as the central source of evaluation. The difficulties in moving beyond simple forms of *substantive communication* may have contributed to the weakness seen in students' *deep understanding*. In the interpretation of these results, it needs to be remembered that *deep understanding* cannot be achieved by simply focusing on "less" content but requires critical consideration of fundamental perspectives associated with key concepts (New South Wales Department of Education & Training, 2003d).

3.2 Quality Learning Environment in the Stage 4/5 HSIE Classrooms

The score for the **Quality Learning Environment** (mean = 16.02, sd = 2.67) was lower than the theoretical mid-point (18). From the descriptive statistics presented in Table 2 there were no elements that scored in the high-range. *Social support* and *student self-regulation* scored in the mid-range. *High expectations* and student *engagement* scored in the low mid-range with *explicit quality criteria* and *student direction* scoring in the low-range.

Table 3 Quality Learning Environment

Elements (n=61)	Mean (SD)	'Typical HSIE Pedagogy'
Quality Learning Environment	16.02 (2.67)	
Explicit Quality	1.49 (.674)	Only general statements are made during the lesson regarding the desired quality of student work.
Engagement	2.84 (.820)	Most students are engaged in parts of the lesson, but may appear indifferent during other parts with very few students clearly off task. Engagement is variable to sporadic.
High Expectations	2.52 (.673)	Some students are involved in challenging work during some of the lesson. They are encouraged (explicitly through lesson processes) to try hard and to take risks and are recognised for doing so.
Social Support	3.84 (.583)	Social support is clearly positive. Supportive behaviours and comments are directed at most students, including clear attempts at supporting reluctant students.
Students' Self-regulation	3.62 (.662)	Most students, most of the time, demonstrate autonomy and initiative in regulating their own behaviour with minimal interruptions to the lesson. Once or twice during the lesson, the teacher needs to comment on and correct student behaviour or movement.
Student Direction	1.70 (.691)	While students exercise some control over some aspect of the lesson (choice, time, pace, assessment) their control is minimal or trivial. Instead, the teacher explicitly determines what activities students do and how and when they are to do them.

In the 'typical HSIE pedagogy' of the **Quality Learning Environment**, *social support* was an important element with the teachers encouraging students to try hard and to take risks in a climate of mutual respect. In such a climate, it would be expected that students were able to regulate their own behaviour. However, *students' self-regulation* seemed to be associated with instructional activities designed to support student behaviour management. In nearly all the lessons observed *student direction* was low with these HSIE teachers explicitly determining the activities undertaken by the students. This focus on teacher-centred instruction, involving less challenging work, appears to have impacted on student *engagement* with only some students being seriously engaged and trying hard. Of lesser importance was the *explicit quality criteria* element.

The low level of *explicit quality criteria* observed in these Stage 4/5 HSIE classrooms is important, as the NSW Board of Studies *K-10 Curriculum Framework* involves a standards-referenced framework (New South Wales Department of Education & Training, 2006). This framework provides

a set of broad learning outcomes, that summarises, not only the knowledge students need to learn, but also, the skills, values and attitudes essential for students to succeed in and support learning beyond their schooling. In such a framework, student achievement is judged in relation to syllabi standards (New South Wales Board of Studies, 2003a, 2003b). That is, what is to be learnt by students is linked to learning outcomes through descriptions of levels of achievement of that learning, that is, standards. However, in the classrooms observed students were not usually made aware of the explicit criteria required for high levels of achievement. The high incidence of teacher directed activities led to the belief that the teacher was aware of the criteria and taught towards them but had no expectation, or did not want to take the risk and that students could do this for themselves. These findings indicated that there was a need for teachers to develop instructional activities that allow students to take more responsibility for their learning.

3.3 Creating Significance in Stage 4/5 HSIE Classrooms

The **Significance** dimension (mean = 16.31, sd = 2.284) had the highest score of the three dimensions, but was lower than the theoretical mid-point (18). From the descriptive statistics presented in Table 4 *inclusivity* had a high-range score and the highest score of all 18 elements. *Background knowledge* had a mid-range score with *connectedness* and *cultural knowledge* scoring in the low mid-range. Low range scoring elements were *knowledge integration* and *narrative*.

Table 4 - Significance

<i>Elements HSIE (n=61)</i>	<i>Mean (SD)</i>	<i>'Typical HSIE Pedagogy'</i>
Significance	16.31 (2.28)	
Background knowledge	3.18 (.671)	Students' background knowledge is mentioned or elicited briefly, is connected with the substance of the lesson, and there is at least some connection to out-of-school knowledge.
Cultural Knowledge	2.18 (1.073)	Some cultural knowledge is evident and is valued in the lesson, but it is treated in a superficial manner.
Knowledge Integration	1.79 (.755)	Some minor or trivial connections are made. Knowledge is mainly restricted to the topic or subject area
Inclusivity	4.30 (.558)	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.
Connectedness	2.82 (.885)	Students recognise some connection between classroom knowledge and the situations outside the classroom, but they do not explore the implications of these connections. Connections remain largely abstract or hypothetical.
Narrative	2.05 (.740)	Narrative is used only on occasions as a minor part of the lesson and/or is loosely connected to the substance of the lesson.

In the '*typical HSIE pedagogy*' of the **Significance** dimension the expert HSIE teachers clearly saw *inclusivity*, with highest score of all 18 elements as a high priority. Further, the teachers utilised the *background knowledge* of their students to explain and to assimilate new subject knowledge and skills. However, while student *background knowledge* of Stage 4/5 HSIE subject knowledge was deemed important, *cultural knowledge* and *knowledge integration* were treated superficially. When *narratives* were observed, the 'story form' and the recounting of people's life histories and events were common.

While *connectedness* was apparent, it was superficial with only some effort during instruction to influence audiences beyond the classroom. While there were examples of connections between other topics or subject areas the minor or trivial nature of *knowledge integration* suggests the existence of clearly defined knowledge boundaries between Key Learning Areas (KLAs) or subject areas in schools. The mid-range score for *deep knowledge* supports this understanding with the strength of KLA or faculty boundaries seeming to restrict knowledge transfers across boundaries. However, connections were often made between the cross-curriculum perspectives found in the NSW Stage 4/5 syllabus documents including literacy, numeracy and Aboriginal perspectives (New South Wales

Board of Studies, 2003a, 2003b). The use of textbooks and teacher-centred instruction provided limited opportunities to promote *connectedness* in classrooms. The interconnections between these elements may have impacted on *engagement* as students were unable to recognise connections between classroom knowledge and situations outside the classroom.

It would also appear that the difficulty in incorporating *cultural knowledge* was related to the dominance of traditional subject knowledge found in the Stages 4/5 History and Geography classrooms. The lack of recognition or valuing of *cultural knowledge* or meaningful connections made within or between other topics or subjects could create disincentives for students to participate in classroom discourse. Clearly, awareness needs to be raised for teachers about the importance of cultural backgrounds, interests, and life experiences of students and the value of 'school learning' within the wider social experience.

4. Conclusion

The primary objective of this study was to advance research in the field of Quality Teaching by gathering sufficient data to illuminate the quality of pedagogy in classrooms. There are very few such studies that provide direct evidence of what happens in classrooms and thus by using the ranking available via the use of the NSWQTM, some guidance about what areas can be improved is provided. The finding of a low level of Quality Teaching in these Stage 4/5 HSIE classrooms was unexpected as these were expert teachers.

The '*typical HSIE pedagogy*' that emerged suggests that these expert HSIE teachers were being very careful in their pedagogy and taking a controlling role in the classroom interactions. In these classrooms teacher-centred instruction was preferred to deliver the mandated subject knowledge and skills. The teacher-centred tasks to promote *deep understanding* in most instances were not challenging and did not include *high expectations*, were routine and involved lower-order thinking. Students' *deep understanding* was elicited through the recall of factual information and by defining terms using IRE communication strategies thus limiting *substantive communication*. The low levels of *knowledge integration*, *connectedness* and *cultural knowledge* further indicated the importance placed in these classrooms on completing this fixed body of unchanging subject content knowledge. Exploring students' *background knowledge* focused mainly on reviewing subject knowledge and skills from past lessons. A low level of *explicit quality criteria* suggested that the teachers controlled the feedback to students about the quality of their work. What was important for these expert teachers was promoting high levels of *social support* and *inclusivity*. It could be argued that the focus on teacher-centred instruction, *social support* and *inclusivity* were primarily designed to support student *self-regulation* (in a classroom management sense) and *engagement*. Overall, in the HSIE classrooms in this study there was a clear preference for teacher-centred strategies (as opposed to student-centred). As HSIE is essentially an area of the curriculum that is inquiry focused and constructivist based, this would appear to be an unusual focus for this area of the curriculum.

The prominence of teacher-centred strategies in the Stage 4/5 HSIE classrooms and the capacity of student-centred strategies to develop high levels of Quality Teaching warrant further attention by researchers. In the interpretation of the classroom observation findings of this study, it must be remembered that there is no empirical evidence indicating that student-centred or constructivist perspectives would have been better than teacher-centred modes in promoting higher levels of Quality Teaching. However, the strong preference for teacher centred approaches and the resultant poor ratings on the NSWQTM rankings provides a quandary for those who purport to encourage students who are self-directed and problem solvers.

It is evident that the teachers were not prepared to entrust the learning to the student. We would postulate that the external examinations were guiding their teaching approaches with their own accountability, a key driver of the '*typical HSIE pedagogy*'. It is obvious that such classroom observations have the potential to help teachers improve their pedagogical skills but if the teachers do not believe that such strategies will lead to better examination results then it is in vain. Teacher accountability drives pedagogy – not 21st century learning.

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