

Conceptual understandings as transition points:

Making sense of a complex social world.¹

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Abstract

Teaching for conceptual understanding has been heralded as an effective approach within many curriculum frameworks internationally in an age of rapid and constant change around what counts as 'knowledge'. Drawing from research and experience within the social studies curriculum in New Zealand, this paper reflects on some of the largely unstated and unexplored aspects of adopting concept-based approaches to curriculum. The paper explores the historical and contemporary status and development of conceptual understandings that has led to teaching (at least within New Zealand social studies) that still remains largely focused on facts and topics. The nature of learning within the social sciences highlights a society which is not static and factual, but instead, complex and diverse. This paper presents a number of reasons why teaching conceptual understandings as inert facts or 'end points' fails to prepare learners to understand and engage in a complex and rapidly changing social world. Instead, conceptual understandings must be understood as changeable, contextual, and contested. The paper considers how conceptual fluidity might be accommodated in teacher planning, arguing that conceptual understandings may more usefully be regarded as transition points in learning, rather than irrefutable destinations.

Keywords:

concept teaching, teacher education curriculum, knowledge base for learning, social studies, teaching methods.

¹ An earlier version of this paper was presented at SocCon Social Science teachers' conference, Auckland in September 2007.

Introduction

Teaching for conceptual understanding has been heralded as an effective approach within many curriculum frameworks internationally in an age of rapid and constant change around what counts as 'knowledge'. However, a number of limitations in this approach remain largely un-stated and unexplored, particularly in relation to the risks of viewing conceptual understandings as learning destinations. Focussing on social studies, a subject within the social sciences learning area of *The New Zealand Curriculum* (Ministry of Education 2007b)², we explore the status of conceptual approaches to New Zealand social studies education. We emphasise that viewing 'concepts as tools for understanding and action in social studies teaching and learning' (Rob Gilbert, personal communication, 26 May, 2008) is an important approach (see also Lipman 2003). However, in the remaining sections, we highlight the need for conceptual approaches to closely align with the nature of changing bodies of knowledge in a fluid social world, arguing a case for viewing concepts and conceptual understandings as changeable, contextual, and contestable. We conclude that conceptual understandings are better understood as transition points rather than endpoints.

The status of a conceptual approach in New Zealand social studies

There is currently substantive international literature on concept-led education (see for examples Brophy and Alleman 2006; Erickson 2002, 2007; Gilbert and Vick 2004a; Wiggins and McTigue 2005). More than forty years ago, the seminal work of Hilda Taba pointed out that conceptual understandings (ideas) are much more important than knowing facts (Barr 2005: 7). The development of conceptual understanding has been a strong feature of social science learning in New Zealand since the early 1960's (Aitken and Sinnema 2008). Subsequently, this notion has imbued New Zealand social sciences curriculum documentation, expressed as, for example as 'important ideas' in Social Studies, Geography and Economics (Department of Education 1977; Ministry of Education 1990a, 1990b). By the time *Social Studies in the New Zealand Curriculum* (Ministry of Education 1997) was written, the notion of teaching for conceptual understanding was well understood by the writers of its allied Position Paper (Barr *et al.* 1997 :52):

Students need to work with a range of information in order to construct broad ideas which can be reapplied in new situations...the principal task for the social studies teacher is not simply delivering information but developing conceptual understanding.

More recently, teaching for conceptual understandings has reached new levels of interest and focus in New Zealand social studies. Primarily this came about when assessing 'conceptual understanding' became part of the national assessment system in 2004 and examiners had to begin to define what demonstrated effective knowledge of concepts³. The recently released *The New Zealand Curriculum* (2007b) also emphasises, albeit somewhat indirectly, teaching for conceptual understanding within the social sciences (see 30). The publication of the series *Building Conceptual Understandings in the Social Sciences* (Ministry of Education 2008a, 2008b)

² Social studies in the New Zealand curriculum represents an integrated approach to the social sciences, drawing from the disciplines of sociology, geography, history, economics. Social studies is a compulsory subject for all students in Years 1-10. Students can elect to study the senior social studies, geography, history and/or economics from Year 11 onwards.

³ Understanding of concepts were assessed within the senior social studies (internal and external assessment) Achievement Standards of the *National Certificate of Educational Achievement* (NCEA) in 2004 for the first time.

represents the clearest signal to date that a concept-led approach is strongly advocated in New Zealand social studies teaching and learning.

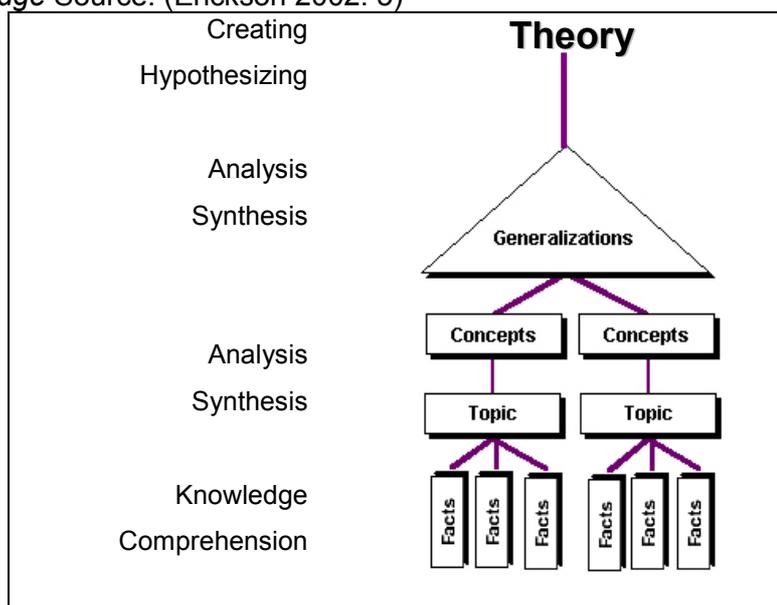
Notably, working definitions of 'concept' and 'conceptual understanding' in the wider New Zealand social studies documentation have appeared since 2004 (see Ministry of Education 2007a, 2008a, 2008b). In the absence of any other standard definitions for 'concept' and 'conceptual understanding' in New Zealand social studies, we adopt those provided in the Guide Notes as a starting point for our discussion. Here, a concept is described as...

...a general idea, thought, or understanding. They can be expressed in a single word such as *democracy* or *needs* or a simple phrase such as *social decision making* or *cultural practices*...

...Conceptual understandings are what learners know and understand about a concept. When concepts are elaborated into generalisations, they become conceptual understandings...There can be a range of conceptual understandings associated with any one concept (Ministry of Education 2007a: 2).

Despite the rhetoric in social science curriculum documents, a focus on conceptual understanding appears to have been largely overlooked by New Zealand teachers and classroom findings suggest that it has failed to impact on social studies teaching (Cubitt 2005). The Education Review Office (2001) found that many teachers viewed achievement objectives as discrete bodies of knowledge, without obvious vertical linkages, and failed to see the social studies concepts buried within them. More recently, the National Education Monitoring Project (2005) found that social studies students in years four and eight tended to have superficial understandings of issues and situations, rather than deeper, conceptual understandings. Viewed through Erickson's structure of knowledge (2002) (see figure 1) it appears that New Zealand social studies teaching has focused on the lower levels of the diagram, centred round topics and related facts. Rarely, it appears, do teachers get to the levels of concepts, generalisations (conceptual understandings) or theory.

Figure 1 Structure of Knowledge Source: (Erickson 2002: 5)



Source: (Erickson 2002: 5)

In part, a lack of conceptual clarity in social studies teaching and learning may be attributable to the ill-defined nature of 'concept' and 'conceptual understanding' in successive social studies curricula. Of course, precisely what a concept is has exercised the minds of philosophers for centuries. This is because theoretical debates about concepts are inextricably linked with highly contested notions of mind and language⁴. Furthermore, Golding (2002: 1) notes that in education in general 'concepts are rarely examined in any depth. They form the framework and background of our thinking, rather than what we think about'. These matters notwithstanding, successive New Zealand social studies curricula have been marked by a definitional silence. Despite the fact that the 1997, 1998 and 2007 social studies documents have been organised around conceptual 'strands' and 'achievement objectives', no definition has been provided for 'concept' in any social studies curriculum and only some examples have been given (see Ministry of Education 1997: 14).

Another reason for the lack of conceptual clarity in social studies teaching and learning may also stem from a lack of explicit directive. Aitken (2005) argues that neither *Social Studies in the New Zealand Curriculum* (Ministry of Education 1997) nor the supporting handbook (Ministry of Education 1998), stated at any point that students should progressively develop their understanding of concepts despite curriculum documents being based around conceptual understandings. Though the conceptual focus of the curriculum was evident to curriculum developers and teacher educators, there was insufficient signposting for teachers to realise the importance of concepts. Failure to be specific about what is required in curriculum can lead to change being unrecognised or misunderstood (Aitken 2006), and, in the case of New Zealand social studies, concepts being largely unused in teaching and planning. In sum, it appears that despite a long *theoretical* tradition in embedding concepts into social studies teaching, many social studies teachers in New Zealand, quite understandably, have failed to understand the importance of highlighting a central conceptual theme or structure, and have instead focussed on isolated facts, 'minutiae, and trivia' (Barr 2005: 52).

The importance of a conceptual approach in a complex social world

While later in this paper we outline some potential limitations in planning for conceptual understanding, we emphasise that a concept-led approach is vital. In a myriad social world, determining which aspects of society should form a context for learning has been a perennially difficult task confronting social studies teachers. A considerable strength of teaching for conceptual understandings is that it enables teachers to sift and sort through a huge amount of knowledge and start to define 'what counts'. When planning conceptually, a teacher is forced 'beyond the facts to the conceptual level as each topic was filtered through the bigger idea...' (Erickson 2002: 7). Even when planning a topic delineated by an achievement objective a teacher is faced with a vast sum of 'facts' that could be drawn from. But the world is changing at too fast a pace to focus on topics and facts. In our experience, concept-based approach to learning helps mitigate the 'mile wide and inch deep' criticism so often directed at social studies; we have observed teachers reduce coverage, teach in far greater depth and support repeated engagement with key conceptual understandings as a result of concept-led planning.

Developing teaching toward concepts and conceptual understandings also enables learners to understand more about their social world and participation within it. Some

⁴ See, for example, <http://plato.stanford.edu/entries/concepts>

writers regard concepts as necessary tools for human understanding and action; they are the 'vehicles of thought, entities by which thought is carried on' (Harre (1966), cited in Lipman 2003: 8). When teachers deliberately assist learners in their concept formation through the analysis and clarification of concepts, learners are more likely to see the significance of concepts in the social world. As Splitter and Sharp (1995: 130) argue in relation to concepts that are contestable or problematic (such as rights, rules or knowledge):

To give children the opportunity to probe them in a classroom community is to assist them, not only to become clearer about what these concepts mean in their own experience, but to begin to realise how they are differently interpreted by different people and how these different interpretations matter in living one's life. Thus children come, not only to a deeper understanding of themselves, but a richer understanding of others.

A great deal of the power in teaching for conceptual understandings lies in the linkages it enables learners to make between contexts, concepts, ideas and information. In a world of rapid and exponential change, a concept-led approach supports students' critical and creative thinking skills; the ability to 'assimilate, sort and pattern information' (Erickson 2002: 67) in order to create new knowledge. Teaching for conceptual understandings rather than facts and topics provides a frame for thinking, allowing learners 'to identify, label, classify and relate phenomena to construct systems of ideas that we apply to new situations and use to ask questions and solve problems' (Gilbert and Vick 2004b: 84). Barr (2005: 111) affirms this view for New Zealand social studies when he states '[p]roviding students with factual knowledge is not sufficient in social studies. Students need to work with factual information in order to construct broad ideas which can be reapplied in new situations'.

Similarly, Erickson (2002: 7) argues 'deep knowledge transfers across time and cultures and provides a conceptual structure for thinking about new ideas' (p. 7). In sum:

If cultural universals [concepts] are taught with appropriate focus on powerful ideas [conceptual understandings] and their potential life applications, students should develop basic sets of connected understandings about how the social system works, how and why it got to be that way over time, how and why it varies across locations and cultures, and what all of this might mean for personal, social and civic decision making (Brophy and Alleman 2006: 422).

Planning for conceptual understandings: some limitations revealed

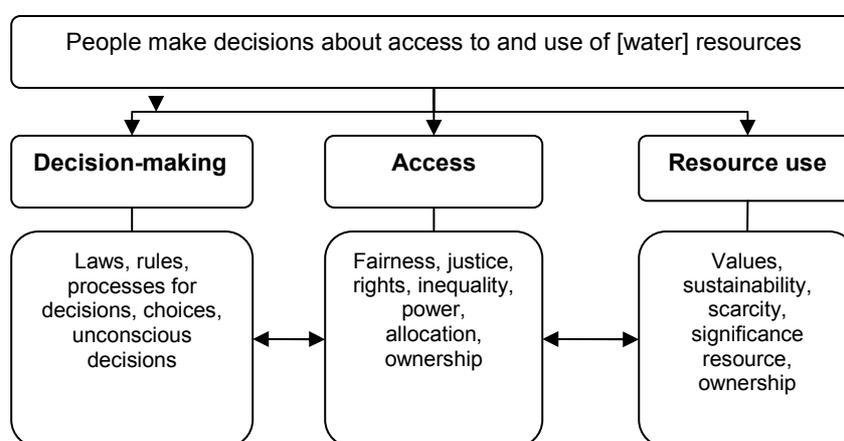
Whilst we outlined the many apparent and necessary strengths of teaching for conceptual understandings, the next sections of this article raises some associated limitations. Over some number of years, with both pre-service and in-service teachers, we have explored what concept-led social studies planning might look like in the context of the New Zealand curriculum. Our experience in promoting this approach has revealed some potential pitfalls. Together the following observations highlight the need to think of conceptual understandings as transition points rather than endpoints.

To begin with, let us explain two, seemingly innocuous, steps we have suggested in planning for conceptual understanding. By way of example, the following Level Three social studies achievement objective⁵ is threaded through this section: "people make

⁵ Students working at Level 3 of the curriculum are generally Years 5 and 6 (ages 9-10).

decisions about access to and use of [water] resources” (Ministry of Education 2007b). The first approach we have recommended is to identify the key concepts in the wording of the achievement objective. In this instance, one can identify three key concepts: *decision-making*, *access*, and *resource use*⁶. Of course, these are not the only concepts that might underpin the achievement objective – other concepts, such as ‘values’ or ‘inequality’, are equally pivotal to a learner’s understanding of this achievement objective. It is for this reason that we suggest the key concepts within an achievement objective could be regarded as ‘conceptual fields’ (Milligan 2006), that is, clusters or families of concepts. Figure 2 provides examples of concepts that teachers might include within the three conceptual fields of our selected achievement objective.⁷

Figure 2: Conceptual fields



The second step, identifying and prioritising ‘key conceptual understandings’ that teaching and learning might be directed toward, is derived from Brophy’s (2006) notion of ‘powerful ideas’. It is synonymous with other terms used in the international literature: big ideas, generalisations, principles, enduring understandings, essential understandings and key understandings. Though the achievement objective is itself a conceptual understanding, this process serves to both contextualise the objective and break it down further. Figure 3 illustrates a sample (rather than a complete or definitive list) of these possible conceptual understandings in the context of our selected achievement objective.⁸

⁶ In *The New Zealand Curriculum* (2007b), achievement objectives such as this one focus on abstract concepts, rather than people, places, events, eras or tangible objects. It is for this reason that Figure 2 does not include terms such as ‘the Minister for the Environment’, ‘Lake Taupo’ or ‘rivers’.

⁸ Note that, linguistically, each statement begins with ‘that’ as opposed to being phrased as questions or behavioural objectives.

Figure 3: Examples of conceptual understandings

Students could understand that:

1. water is a scarce resource
2. water is significant to people for economic, spiritual and health reasons
3. individuals, communities, groups and governments make decisions about the ownership of water
4. people's decisions influence the sustainability of resources, species and environments
5. people's power to improve their access to water is shaped by political, technological, social and geographical forces

Almost immediately, the limitations of determining key concepts and conceptual understandings in teacher planning become apparent. For example, the teacher has consciously or sub-consciously, arrived at a point in planning or thinking that requires a value judgement – from what perspective will I examine this achievement objective? What concepts will I focus on? Which context will bring out what I feel is really important for students to learn? Which conceptual understandings do I feel are most important for my learners? Brian Hill (1994: 6) believes that 'teaching social studies is always a value-loaded act'. He explains that choices teachers make at every level in planning and teaching are informed by values. In Figure 3, the choice to emphasize one conceptual understanding over numerous other ones is a 'value-loaded act'. This example illustrates that the teacher has made a number of value judgements about how s/he will approach this achievement objective. Yet, it is unlikely that s/he has examined the theoretical framework or values associated with these conceptual choices, thus leaving wide open the potential for unacknowledged cultural/social or political bias, or at worst, a form of indoctrination. Hill proposes that at this stage we 'problematise' social studies in order to 'face up to the continuing ideological questions it raises' (1994: 7). In this regard, we make five inter-related observations about the nature of concepts and conceptual understandings using examples derived from a social studies context. Central to this discussion is our view that conceptual understandings are highly **contestable**, subject to **context**, and **change** through time.

First, concepts are contestable. If we view concepts as having essential properties, then each of the concepts in figure 1 could easily be taught by definition: 'fairness is...', 'ownership is...' and so on. This 'glossary approach' carries a significant risk of over-looking the plurality of perspectives in our social world. Respectable arguments have been made that such concepts, if not all concepts, are highly contestable (for example Gallie 1956; Sarup 1993; Wittgenstein 1953). Using the context of inquiry introduced earlier to illustrate this, people have quite different notions of what constitutes fairness in relation to the allocation of water resources. The following discussion about ownership demonstrates, similarly, that people may attach quite different meanings to concepts. 'Ownership', for example may seem, on the surface, a pretty obvious concept. If you buy or are given something, it is yours and you own it. However, a brief examination of a Maori understanding of ownership highlights the potential for grave misunderstandings.

Figure 4: The contested nature of 'ownership'

Durie (1994) argues that within traditional Maori understandings of ownership, land rights were inseparable from the community from which one was a part of and that no land or resources could therefore be owned by an individual. The right to access to land was more like a licence for an individual which enabled the use of particular resource, without rent, but with obligations to return benefits to the whole community to the fullest, practicable extent (Durie 1994: 328). This understanding is in sharp contrast to a western European concept of ownership, in which if you purchase or are given something, it is yours to keep and use. Conflict over these differing conceptual understandings has plagued legal, moral and social issues throughout New Zealand's history, and more recently in the legal case *Ngati Apa v Attorney General* (CA 173/01 CA75/02, 19 June 2003, (cited in Maihi 2003). At the heart of this issue is a philosophy toward life and nature: Maori saw themselves not as master of the universe, but as members of it and thereby related directly (through their whakapapa (genealogy) to all life forms and natural resources (Durie 1994). The concept of ownership within this framework is vastly different than the concept of individual possession inherited by a European system of philosophy and law.

Second, the selection of conceptual understandings foregrounds some aspects of our social world and, at the same time, backgrounds others. For example, beyond the seemingly straightforward statement in figure 3, "water is a scarce resource" there is much more to be said. Is water scarce for all people in all places? Do all people perceive water as being scarce? This example may lead to reader to question *who* determines the aspects of society are to be fore-grounded in conceptual understandings. The achievement objectives provide some guidance, but predominantly the identification, wording and prioritisation of conceptual understandings in social studies planning is determined by the teacher. The teacher cannot represent all there is to be said about a particular societal context or ever provide sufficient opportunities to do so. Choices must be made and this, as noted earlier, is a matter of value judgement.

Third, and though their language may appear dispassionate, *social sciences conceptual understandings are imbued with disagreement*. To illustrate, let us examine another conceptual understanding from figure 3: "that individuals, communities, groups and governments make decisions about ownership of water". When this idea is contextualised (for example, in the case described in figure 5) its controversial nature becomes evident. The conceptual understanding usefully describes who *might* be involved in decisions about bottling water, but underneath its surface are issues of power: who gets the *most* say, *how* such decisions arrived at and whose interests those decisions might *serve*. These are the matters of debate.

Figure 5: Access to bottled water in Finland

In northern Finland, Suttasaja (Stream That Doesn't Freeze Over), an ancient sacred site and natural spring, is threatened by plans to bottle and sell the spring water on the world market. Finland's indigenous people, the Sami, have been protesting against this as Suttasaja is a place of healing; and the stream itself is part of the watershed that is home to Europe's largest salmon river, and important part of Sami livelihood. One Sami man explains, "Nature is the most important thing. The Samis did not disturb nature and we have lived here for thousands of years" (Global Education Centre 2007: 5)

Fourth, *conceptual understandings are contextual*; the meaning of a concept is different in different circumstances. In new contexts, such as comparing the Sami case to the commercial use of natural spring water in New Zealand, learners are likely to find new perspectives, counter-examples, or new information that shifts their understanding. In other words, though some conceptual understandings may have greater fertility and durability, they are subject to change:

We know that historical, cultural, gender and other differences will affect the way we see the world, and this can be just as true of the way we define and use concepts as of any other aspect of our interpretations of the world. In such a situation, knowledge is always provisional and tentative, subject to constant testing in different situations and for different purposes (Gilbert and Vick 2004a: 91).

Last, and critically, *conceptual understandings are theoretical frameworks* (the top layer in Erickson’s diagram, refer figure 1). Conceptual understandings are ‘frames of thinking’, a matter of prejudice, partiality, and bias. Frames are never neutral or objective, but they are necessary for understanding. Though the conceptual understandings in figure 2 may appear incontrovertible and neutral, their underlying assumptions are derived from a *particular* stance. Using a similar idea to Gilbert and Vick (2004a: 85)⁹ we have ‘framed’ the original five conceptual understandings in figure 3 to illustrate how they could represent a range of differing theoretical perspectives (as shown in figure 6).

Figure 6: Possible theoretical frameworks

Possible theoretical perspectives	Economic perspectives	Cultural perspectives	Democratic perspectives	Ecological perspectives	Social justice perspectives
Possible conceptual understandings	Water is a scarce resource	Water is significant to people for economic, spiritual and health reasons;	Individuals, communities, groups and governments make decisions about access to water	People’s decisions influence the sustainability of resources, species and environments	People’s power to improve their access to water is shaped by political, technological, social and geographical forces.

Acknowledging these different perspectives highlights ‘different questions and relationships’ (Gilbert and Vick 2004a: 85) and allows for deeper conceptual understandings to be developed within these frameworks. Stating these possible perspectives makes more explicit that learning (and knowledge) is not neutral and allows learners to gain a deeper understanding of contested and conflicting theoretical positions. ‘One cannot step outside of one’s frame – but it is possible to become more aware of it’ (Davis *et al.* 2000: 38). And better still; enable our learners to do the same.

⁹ Gilbert and Vick (2004a) illustrate in a table how hypothetical news items could be conceptually classified quite differently when viewed from different theoretical perspectives.

The insights offered above reveal the very real potential for concepts and conceptual understandings to be misconceived and misused as prescriptive, inert destinations in learning. When taken as a whole, it is clear the ongoing intellectual growth of a learner is dependent on exposure to new perspectives and contexts. So, why is it so easy to fall into teaching conceptual understandings as destinations? And why is this a risk for the social sciences in particular?

A cautionary note: conceptual understandings conceived as end-points

While they would warrant further investigation, two inter-related forces appear to divert teachers from viewing conceptual understandings as contested, changeable and contextual. First, an outcomes-led New Zealand curriculum has the effect of reducing the study of society to a series of static conceptual understandings. While most of us recognise that our world is one of 'baffling complexity', it is likely that as teachers, we educate about a world of certainty. Within the current outcomes-based curriculum, society is reduced to manageable units of description in the form of achievement objectives and achievement standards which eventually require assessment. A central aim in education within the social sciences is for students to develop an understanding of 'how societies work' (Ministry of Education 2007b: 30). If the society teachers describe is ordered and predictable, students are precluded from exploring the highly complex, changeable and contestable nature of societies (Milligan 2006). This is likely an alienating and foreign experience to young people today as the society they know is probably messy and complex, not neat and ordered.

Second, rather than regarding planning as a 'thought experiment' (Davis, Sumara and Luce-Kapler, 2000), many teachers understandably view it as technical task associated with compliance. As a result, the less than certain notion that teaching *might* be directed towards *possible* conceptual understandings becomes lost in processes of accountability. This tendency is described succinctly by Morrison (2003: 280):

The allure of certainty is difficult to resist in curricula. If we know what we are supposed to be doing, what it is for, why we are doing it, how we are doing it, how well we are doing it, and how well it meets expressed purposes and given agenda, then we have a model of accountability that is sufficiently attractive for governments and policy makers to seize with both hands.

The risk of treating concepts and conceptual understandings as inconvertible is that they simply become 'facts' by another name; a conceptual approach becomes synonymous with teaching for factual understanding. In our view, teaching concepts and conceptual understandings as static 'facts' or end-points misses the whole purpose of social studies learning. In addition, a prescriptive check-list of conceptual understandings (that learners must arrive at) risks teachers and learners overlooking rich conceptual understandings that might *emerge* from the learning. Without teachers understanding this, students miss out on learning for discovery and critical inquiry with an unmapped pathway ahead. No more important is this complex, discovery learning, than in social studies – the subject that arguably provides the best vantage point to examine a world of rapid change, conflict and complexity.

Critically, it is precisely because social studies is an area with no acknowledged consensus of knowledge and understandings that could serve as a template for learner outcomes (Meyer 1998), that we urge that conceptual understandings must not be regarded as the end-points or destinations of learning. Society is alive with controversial issues, conflicting values, diverse and multiple expressions of identity and actions. To a greater degree than other more canonical and examination syllabus-driven subjects such as physics, maths and modern languages, social

studies is embedded in the examination of values and the cultural contexts in which they are created (O'Neill 2005). Meyer (1998) argues that '...precisely because it is contentious, social studies gives us the ideal set of circumstances for developing young people who are critical thinkers and responsible decision-makers' (p. i). Yet, treating conceptual understandings as a series of full-stops serves only to misrepresent our learners' changeable social worlds. Furthermore, and without the teaching and learning of values, controversy and conflict, we render students ill-equipped to deal with a complex and conflict-ridden world (Wood 2007). If social studies is concerned with the practice of living and making decisions as individuals and groups, then acknowledging the multiple values and perspectives that are represented in society is essential (Barr 2005). Thus, the very nature of social studies requires the presentation of a less ordered and less certain world. This is the open-ended project of social studies, yet conveying this remains a crucial challenge to the social studies teacher.

Conceptual understandings as transition points

Our moral imperative as educators is to see all children as precious and recognize that they will inherit a world of baffling complexity (National Council for the Social Studies 1992).

How does one reconcile the cautions we have raised with the many necessary and apparent strengths of concept-led planning? How might teachers accommodate conceptual understandings in their planning in ways that avoid cognitive dead-ends? In fact, why use them at all if they cannot offer some definitive conclusion to learning? Rather than abandon a conceptual approach in the face of the instability of conceptual understandings, we suggest that social studies planning should and can embrace their provisional and troublesome nature. In this section, we strongly recommend that conceptual understandings be conceived as **transition points**, rather than destination in social studies learning.

In our view, the most important step to be undertaken prior to planning for conceptual understandings is for teachers to carefully consider the meanings that they bring to 'concept' and 'conceptual understanding'. In doing so, the previously outlined considerations about concepts and conceptual understandings could usefully be viewed as possible (but not final) tenets for the framing and using of conceptual understandings within the social sciences.

Conceptual understandings provide a valuable pedagogical structure to social studies planning and thinking when they serve as shared understandings between teachers and learners; a point where everyone is 'on the same page'. However, conceptual understandings should never be presented as the end of the matter. In our view, they are 'conceptual nodes'¹⁰ (Milligan 2006); *temporary* resting places or transition points in a learning journey. Conceptual nodes, as we intend them, differ from Brophy and Alleman's (2006) notion of 'powerful ideas' in that they are not "big ideas that anchor instructional units" (Brophy and Alleman 2006: 424 our emphasis), in the sense of being end-points to learning. Conceptual nodes are conceptions that have greater fecundity or performativity than learners' existing [mis]conceptions. They may well have established meanings or be 'warranted assertions' (Dewey 1933). But, in addition, they are provisional 'destinations'. Rather than being presented as irrefutable, each conceptual node is held up as a subject of further inquiry and critique; that is, they are presented as troublesome. It is in this way that social studies planning becomes recursive, or self-questioning, rather than end-

¹⁰ The term 'conceptual node' is analogous to Castells' (2000) conception of contemporary society as networked, comprising of flows of information and nodes that process this information. 'Conceptual node' is used here to contrast against a conception of conceptual development as being linear.

pointed. Thus, conceptual nodes are transitory points of clarification and shared understanding between teachers and learners before learners embark on possibly quite divergent learning trajectories. The power of teaching for conceptual understanding, therefore, does not lie in its apparent certainty, but in the fruitfulness of uncertainty.

Conceiving conceptual understandings as transition points or conceptual nodes presents a challenge for many assessment practices used by teachers. Examining 'transition points' in learning lends itself well to formative assessment practices. However, many social studies teachers wrestle with how to do justice to student's learning in summative and reporting contexts. In our view there is still space within existing summative assessment practices to accommodate the 'fruitfulness of uncertainty'. A detailed description is beyond the scope of this paper; however we wish to make a few preliminary suggestions. First, teachers could develop assessment practices that look for multiple perspectives about conceptual understandings within a student's findings and conclusions. The connection between 'concept' and 'perspective' in assessment criteria directs teachers' and learners' attention towards more complex, more contested understandings of the social world. Second, report comments could focus on both the learners' conceptual growth and transitional nature of their learning, using language that reflects 'journeying' rather than 'arriving'. Greater attention could be given to indicating possible steps for further inquiry and questioning. Importantly, if we have anything to offer as social studies teachers, conceptual understandings must be always presented at all stages of learning and assessment as highly *debatable propositions* and as the subject of further inquiry. It is only when learners are permitted to explore conceptual understandings in a deeper way, when they are truly provided avenues for social inquiry, that the window to *their* complex social world is opened wide.

Conclusions

In this paper, we have put forward the need for a conceptual approach to teaching that responds to a world of rapid change, growing global interactions and expanding knowledge bases. But we have tempered this recommendation with caution, highlighting the limitations of treating concepts and conceptual understandings as immutable, factual endpoint to social studies learning. Through misconceiving conceptual understandings as irrefutable destinations, teachers and learners miss vital opportunities for exploration of deeper, more complex knowledge about concepts – and therefore about the diverse and baffling societies that we live in.

This paper has skimmed the surface of some much deeper debates in philosophy about the nature of concepts and thinking; fields of investigation that, we believe, could more strongly underpin future social studies curriculum developments. After all, what we think concepts and conceptual understandings *are* is a critical determinant in how we go about teaching for conceptual understanding (Jonassen 2006). In the interim, conceiving conceptual understandings as transition points leaves us with challenges. How can we best present a fluid world when constrained by an assessment and standard-driven curriculum framework? If conceptual understanding is developed by non-linear means, what instructional strategies aid learners' conceptual thinking? How do we support learners to deal with conflicting conceptual frameworks? What could a teaching resource that uses less certain versions of knowledge about contested concepts (such as citizenship, identity or globalisation) look like? This paper opens wide the door for future research in this area and many further questions. What we are more certain about is that conceptual understandings are not the end of the learning pathway. In fact – they are the start of a whole new journey...

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