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### Researching the hidden curriculum: intentional and unintended messages

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In this paper, we examine the concept of the hidden curriculum, its importance to pedagogic research in geography and research methods which might be used to investigate it. We review three case studies of research projects which have explored the hidden curriculum in geographical contexts, and use these to illustrate the strengths and weaknesses of different methods. We conclude by suggesting that there is an increasing need for research exploring new elements of the hidden curriculum being created by current changes in the political and economic context affecting geography in higher education in the UK and other countries.

Keywords: hidden curriculum; research methods; sustainability; controversial issues

#### Introduction

#### What is the hidden curriculum?

The hidden curriculum is a complex and ambiguous term which has been used in a range of different ways since it was coined by Philip Jackson in 1968. In "Life in Classrooms," Jackson explored what he saw as the disconnect between what is overtly taught in educational institutions and what pupils actually learn—the "unpublicised features of school life" (Jackson, 1968, p. 17). In higher education, this may be made up of the societal, institutional or lecturers' values that are transmitted unconsciously to students. Much hidden curriculum research has been concerned with its undesirable aspects, such as the tendency to reproduce the inequalities of wider society. A classic example is the ethnographic study by Willis (1978), "Learning to Labour" which—as well as looking at working class subcultures—described the ways in which the organization of secondary schooling contributed to the preparation of working class pupils for a lifetime of work in factories. However, the hidden curriculum is not inevitably negative: "the notion of

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conspiracy is not always implied" (Portelli, 1993, p. 344). Apple and King (1977), for instance, differentiate between "weak" and "strong" conceptions of the hidden curriculum, using "weak" to refer to features inherent in educational processes, such as student socialization and professionalization (including punctuality, neatness and obedience), that may provide benefits for wider society and community cohesion, and "strong" to describe processes of social and cultural reproduction that serve to ensure the "preservation of existing social privilege, interests, and knowledge of one element of the population at the expense of less powerful groups" (Apple & King, 1977, p. 34).

However construed, hidden curriculum research has been used to inform a broadranging critique of covert social and political influences on the curriculum. Work exploring weak aspects of the hidden curriculum has largely focused on the student experience, investigating student responses to institutional rhetoric (Snyder, 1971); how students develop as members of a disciplinary community (Margolis & Romero, 1998) and the ways students are inculcated into maintaining the social order through conformity as a means of achieving academic success (Jackson, 1968; Margolis & Romero, 1998). Research into the stronger dimension has explored issues such as concern about educational institutions tasked with promoting equality that may in fact reinforce gender stereotypes (Stanworth, 1981); the predominance of white institutions, values and belief systems (Brandt, 1986; Mullard, 1982); how education reproduces class dominance, exploitation and inequality (Giroux, 1983; Hargreaves, 1967; Lacey, 1970; Willis, 1978) and structural correspondences between everyday educational experiences and capitalist social relations (Bowles & Gintis, 1976). To date, the majority of this work has focused on secondary education, although there is increasing interest in researching higher education, where less densely codified curricula provide a landscape of potential for multiple hidden curricula to exist (Ahola, 2000; Cotton & Winter, 2010; Margolis & Romero, 1998).

#### Why does the hidden curriculum matter?

Skelton (1997) observed that the "initial wave of critical research into the hidden curriculum... achieved its primary purpose of revealing covert political interference" (p. 177). Indeed, as early as 1978, Hargreaves (1978) posed the question: "from whom, one wonders, is the hidden curriculum still hidden?" (p. 97). However, arguably, many of the ways that education reinforces and reproduces inequalities remain relevant (Giroux, 1983; Kentli, 2009), and the ways in which the hidden curriculum is produced and maintained are poorly understood. Lack of awareness leads to what Willis (1978) describes as a "reductionist tautology," whereby actors within the system believe that "nothing can be done until the basic structures are changed but the structures prevent us making any changes" (p. 186). Furthermore, external forces bring in new ideas and practices. In particular, higher education has undergone a radical transformation as a result of the stateinduced massification of the sector that has challenged traditional liberal perspectives by vocationalizing disciplines and placing increasing emphasis on assessment as the pivotal yardstick of academic achievement. As Apple (1980) observed, "the reproductive function [of education] posits a mirror relationship between the norms and values taught ... and those 'required' in the economy" (p. 47). In education this is partly manifested through equality and opportunity being replaced by efficiency and value for money (Ball, 1990). The formal curriculum in this new milieu is increasingly driven not only by the needs of employers but also by the wider socio-economic context of the "super-complexity" of the 21st century (Barnett, 2000). Exploring these tensions through the concept of the hidden curriculum may offer insights into how competing factors (such as the importance of the discipline, tradition and academic autonomy versus newer political and economic drivers) inform the student experience.

Within this context, what stimulates, motivates and maintains the hidden dimensions of higher education curricula continues to be pertinent, particularly considering the evolving student identity as both consumer and product of higher education. As Skelton (1997) asks: "Do current conceptions of curricula prepare students for the millennium? Do they reflect and anticipate the challenge of living in a world which is rapidly changing and becoming ever more complex, fragmented and uncertain?" (p. 177). To what extent are students able to make sense of and respond to exposure to contradictory information, values, beliefs and practices? Are they cognizant and critical or are they overdetermined, passive recipients of hidden curriculum messages? (Skelton, 1997). The importance of such questions is reinforced by the fact that the lessons the hidden curriculum teaches are experienced daily and embedded over the years students attend education (Bloom, 1972). Documenting features of the hidden curriculum thus remains an essential task in helping to understand the learner's experience of schooling and assists educators in challenging aspects of the hidden curriculum that may subvert the formal goals of higher education.

#### Why research the hidden curriculum in geography?

Recent years have seen renewed interest among geographers in the geographies of education and educating in geography. A specific aspect of pedagogy which might merit further investigation in geographical contexts is conflict in the curriculum. Many geographical topics are contentious or controversial in some way, and the way in which these are handled sends important messages to students about means of participation within unequal societies (Apple, 1990). The examples selected in this paper are of research in sustainability education—which is itself a contested topic—but the hidden curriculum is also integral to other aspects of geography such as development or population and migration studies to name but two. Anderson (2001, p. 30) notes three approaches to researching the hidden curriculum:

- Investigating forms of discrimination, indoctrination and cultural inculcation within the formal curriculum of education systems;
- Explaining the ways and extent to which the environment of educational institutions structures learning conditions and processes;
- Exemplifying "the unstated rules necessary for successful completion of formal education."

The first two aspects are particularly important for geographers and might include research on the processes of selecting topics, sources and perspectives for degree programmes; the teaching and learning contexts of higher education (lectures, seminars, fieldwork) and their impact on student experiences; and lecturers' beliefs and attitudes and their impact on teaching and learning.

One example of the way in which the hidden curriculum influences the selection or emphasis of topics in geography is the discipline's preoccupation with disciplinary assertion and with demonstrating the importance of geography to the understanding of sustainability issues (Purvis & Grainger, 2004). This may encourage a focus on facets of sustainability that most strongly illustrate the geographical dimension, either as a stated agenda or as an implicit theme. Thus, issues of scale, place, connection, difference, globalization, networks and uneven development may feature more prominently



compared with economic, engineering and architectural studies of sustainability (Bailey, 2007, 2008; Castree, 2006). Although this may be partly in response to the expectations of students taking a geography degree, many students do not hold the same allegiance to their discipline as academics, and are more interested in issues *per se* than their geographical properties. This may create conditions for a "battle of ideologies" within the educational setting, or simply mutual misunderstanding whereby staffs are frustrated by students' reluctance to connect with their discipline. Part of the "weak" conception of the hidden curriculum involves lecturers' expectations about students' developing as geographers, an aspiration which may not be shared by the students themselves.

Although not exclusive to geography, the discipline also offers a rich arena for non-formal learning experiences. The contribution of fieldwork is one such context, of which the discipline is rightly proud, which acts as a catalyst for experiential learning (Fuller, Edmondson, France, Higgitt, & Ratinen, 2006). Although fieldwork may explicitly aim to elucidate specific processes or develop skills, and its experiential component might be intended (as part of a more deliberate curriculum unstated in the formal module outline) to increase students' passion for the topic, even seasoned field workers are often surprised at unexpected lessons gained (Dunphy & Spellman, 2009; Healey & Jenkins, 2000; Hope, 2009). These may range from the snippet of knowledge to the sensory experiences of visiting exotic places, for instance, discovering aspects of culture while conducting unguided questionnaire surveys in an unfamiliar locality. It is likely that many such connections remain unarticulated by students who nevertheless draw impromptu lessons which, rightly or wrongly, become lifelong beliefs.

Finally, there are issues related to the attitudes and values of academic staff teaching the subject who may be keen to instil passion for geography or specific sustainability issues. Even for studious observers of positional neutrality in education (and more directly, opponents of sustainability indoctrination), research findings suggest that the important social, ecological and economic issues which sustainability addresses cannot be treated with ambivalence (Cotton, 2006a). Given that the lecturer's perspective may substantially shape the worldviews of individual students, this is a crucial area for research. The aim of researching the hidden curriculum is to make the undisclosed agendas of formal education more detectable. Only by making the hidden curriculum visible can pedagogic researchers and educators better understand the structures which enable some students to succeed and others to be less successful, or the influence of teaching context on what students learn:

once revealed, the hidden curriculum becomes negotiable and visible to all participants ... allowing for remediation, change, defence, improvement, and informed dialogue .... (Anderson, 2002, p. 117)

#### What methods might be used to research the hidden curriculum?

The hidden curriculum raises a number of issues for researchers. It is by definition tacit and not immediately accessible. A range of methods have been used in hidden curriculum research and it is difficult to generalize about 'most appropriate' methods. There is, nonetheless, some evidence in the literature that qualitative approaches may be more suited to researching the hidden curriculum than quantitative approaches, since the researcher is more open to unknowns and subtle distinctions (Vallance, 1980, p. 138). Margolis and Romero (1998), for instance, used wide-ranging interviews to allow respondents to "define the issues they faced" (p. 5) in graduate school. Although questionnaires can help to establish perception and behaviour trends (see Ahola, 2000;

Cotton, Warren, Maiboroda, & Bailey, 2007), they are less likely to yield the depth of response needed really to appreciate why and how aspects of the hidden curriculum take shape, diffuse and are perceived (Anderson, 2002). The fact that characteristics of the hidden curriculum are also highly dependent on context also militates against numerical generalization. Each educational institution is characterized by both shared and particularistic components (Lynch, 1989) and, moreover, impacts are experienced and interpreted differently depending on the drivers, actors and resources operating at particular points in space and time (Latour, 1987).

Among the qualitative methods used, observation is widely regarded as an important tool for revealing the nuances of the hidden curriculum. Lynch (1989) notes that through observational fieldwork, she was able to "get an insight into the school ethos which would not have been possible with postal questionnaires" (p. 36). It is notable also that Willis' (1978) work in schools was achieved by using an ethnographic approach with participant observation over significant time periods spent in the research context. Edwards and Westgate (1994) argue that observing tutor and students' talk is a crucial source of evidence in revealing both manifest and hidden curricula:

As we listen and as we talk, we learn what it is necessary to know, do and say in that area of social life or that setting, and can display the competence necessary to be accepted as a member. (p. 15)

They nevertheless note that "formidable difficulties" exist in analysing natural conversations because of the sheer mass of data generated and the unstructured nature of observed talk (Edwards & Westgate, 1994, p. 16). Despite such practical problems, observation may still be more useful than interviews or questionnaires alone since hidden curriculum research entails the search for meanings and contexts which may not be immediately visible to actors in that context. The "most valuable research approaches will focus on in-depth interviews combined with observations", according to Anderson (2002, p. 125).

When combining interviews and observational methods, another approach which may prove useful is the use of stimulated recall. This technique, developed by Bloom (1953), aims to aid recall of events and thoughts using audio or video stimuli. Underpinning the method of stimulated recall is the premise that a respondent may be able to "relive" an event with vividness and accuracy if presented with clues or stimuli from the original situation (Bloom, 1953). In pedagogic research, this usually involves the researcher observing a lesson, lecture, seminar or online interaction, and then using an audio or video extract or a transcript of an online discussion to prompt discussion in interview. Although there is some controversy over whether using a think-aloud approach is more likely to access authentic thoughts or prompt post-hoc rationalization (Yinger, 1986), there are occasions when it can be beneficial in encouraging tutors to reflect upon specific teaching events or incidents.

The combination of observation and interviews is one example of the use of methodological triangulation to access the hidden curriculum. Methodological triangulation involves the combining of two or more data collection methods, and allows the researcher to check understandings of events with participants and note differences between data collected using different methods (Cousin, 2009). For example, research relying on interviews may risk accessing only "espoused theory" rather than "theory in use" (Argyris & Schön, 1974) and overestimate the occurrence of socially acceptable behaviours amongst the research population. Malone and Tranter (2005) note the importance of triangulation for enhancing reliability and validity, and also the potential for



methodological triangulation to reduce the impact of researcher bias. Among the methods used by Malone and Tranter to explore the hidden curriculum in informal learning and play in the school grounds were drawings, behaviour mapping, interviews, photography, observation and surveys. Importantly, they also examined both pupils and teachers' perspectives, using participant triangulation to test their interpretations. One difficulty with accessing ideological patterns within an educational context is that the perspective of participants will generally mean that only certain aspects of situations are accessible to them. In teaching contexts, the perspectives of the students and the tutor may differ appreciably, but both (in isolation and conjunction) are useful in understanding manifestations of the hidden curriculum (as perceived by different individuals) and the multiple ways in which it can be transmitted.

In summary, a wide range of methods may—and arguably should—be used in conjunction to research the hidden curriculum. In the following examples we illustrate from our own research the ways in which different methodological approaches might be used in this context. The three examples focus respectively on:

- *Curriculum:* how choices of what to include and exclude from teaching form part of the hidden curriculum of higher education;
- *Pedagogy:* the ways in which teachers' views may form part of the hidden curriculum through pedagogic choices made;
- *Institution:* research examining the impact of institutional and campus environments on what students learn through the hidden curriculum.

In each example, we draw out the strengths and weaknesses of methods used for researching this area.

## Example 1: Lecturers' views of sustainability in higher education (Curriculum) Research methods used: questionnaires and interviews

In the first example (Cotton et al., 2007; Cotton, Bailey, Warren, & Bissell, 2009) we aimed to explore lecturers' views on sustainability in the higher education curriculum. The research was undertaken as a single institution case study using mixed quantitative and qualitative methods. An online questionnaire was used for the first stage to gain a wide range of views from lecturers teaching sustainability issues across multiple disciplines. The major advantage of this method was that it yielded a large number of responses (328 in total) from which to undertake statistical analysis, but the disadvantage was that it provided relatively little information from each respondent and responses were somewhat constrained (although this was mitigated by using open-ended response items). The research also relied on self-reporting of beliefs and behaviours by respondents rather than first-hand observation of behaviours and practices as one would in an observational study. The quantitative approach nevertheless revealed some unexpected findings. For example, it was anticipated that lecturers in some disciplines would be inclined to see sustainability as more relevant to their discipline than would others (e.g. geographers and environmental scientists compared with historians or nurses). However, statistical analysis did not reveal statistically significant differences between disciplines in respondents' perceptions of the relevance of sustainability to their disciplines. The only correlation found was between a belief that sustainability was important in general and a belief that it was relevant to respondents' disciplines. The implication of this finding in terms of the hidden curriculum is that it suggests that the choice of what to include in the curriculum (or what it is relevant to include in the curriculum) is heavily mediated by lecturers' wider beliefs and attitudes.

So, rather than seeing a discipline as a set body of knowledge which needs to be imparted to students through the higher education curriculum, it should be viewed as a more flexible entity shaped by the interests, expertise and values of the individual tutors designing and delivering their curriculum. Whilst this aspect was not explored further in the study, there is a scope for further exploration about not only what is included in the curriculum of different disciplines in different institutions but also what is *not* included (the null curriculum).

The second part of the project involved interviews with a selection of lecturers who responded to the survey (Cotton et al., 2009). Respondents were chosen to represent a wide range of disciplines, experience, gender and views on sustainability. The interviews provided further insights into the ways the hidden curriculum might function in higher education. One frequently encountered theme concerned the covert inclusion of sustainability in the curriculum. Staff talked about sustainability "creeping in the curriculum." When pressed to explain, they outlined a series of ways in which occurred, including: the use of examples to illustrate a more general issue; using small amounts of time during a lecture session to expound personal views about sustainability and the choice of texts or cultural artefacts that offered opportunities for commentary on sustainability issues. These respondents were teaching programmes which were not overtly about sustainability from reading documentation on the formal curriculum, such as definitive module records and module handbooks; yet tutors were finding ways of making links to sustainability in what they taught. The fact that words like "creeping," "surreptitious" and "undercover" were used indicates that lecturers were aware of this being a somewhat unauthorized aspect of their curriculum. During reflection on their teaching practices during interviews, many lecturers explained in more depth the ways they felt that their views might influence the curriculum.

### Example 2: teaching controversial environmental issues in geography (Pedagogy) Research methods used: observation and interviews

This research was conducted in secondary schools and focused on the teaching of controversial environmental issues in A level geography (Cotton, 2006a, 2006b). It used a qualitative approach that combined classroom observations (recorded using a radiomicrophone) with interviews with pupils and teachers to enable triangulation of both methods and participants. It also utilized stimulated recall, using clips from audiorecordings or transcripts to prompt teachers and pupils to talk in more detail about specific classroom events. The advantages of combining observations with interviews were that the researcher had a record of shared experiences about specific events and could check the accuracy of respondents' recollections. This proved to be crucial since the pupil and teacher descriptions of certain situations were very different, even in terms of what was said and by whom, and even more so in the interpretation of events. In this context, it was useful to have a transcript of discussions alongside the interview data. It was also clear that the use of stimulated recall enabled teachers and students to provide their perspective on classroom events and interactions. Although these interviews undoubtedly involved an element of "meta-analysis and reflection that was most likely absent in the original event" (Yinger, 1986, p. 271), they were critical in identifying those elements of the hidden curriculum which were not clear to the teacher or researcher during fast-paced interchanges in the classroom.

One key finding from the study was that whilst teachers believed that they should maintain a neutral or balanced approach during classroom discussions of controversial



environmental issues, this was problematic in practice and their own views were revealed as an element of the hidden curriculum. One potential explanation is that teaching controversial issues introduces a conflict within the normal rules of classroom interaction, which themselves form part of the hidden curriculum of all lessons. These rules, broadly speaking, are not only that the teacher controls what knowledge is deemed acceptable and relevant but also that the teacher should not impose his/her views on the students where "facts" are contested or uncertain or where values are involved (Edwards & Mercer, 1987). The result was that teachers' opinions were expressed in indirect ways, through questioning or through control of participants' turns in the discussion. For example, the use of rhetorical questions to challenge students' opinions enabled the teacher to maintain an air of neutrality (and open questioning) whilst actually expressing a personal viewpoint. On occasions, the teachers also strategically managed students' turns in discussion to ensure that a range of viewpoints (especially those they agreed with) were aired. They would ask specific pupils for their opinions on a topic, knowing that the selected pupil was likely to express an argument they wanted to be emphasized. Whilst the teachers used a variety of strategies to avoid expressing their own opinions, line-by-line analysis of observation transcripts, combined with interview data about the teachers' own views, revealed the impossible nature of this task. In contrast to their espoused beliefs about not expressing personal viewpoints, the data suggest that the influence of the teachers' attitudes was greater than they either intended or, in all probability, realised.

### Example 3: Students' views of sustainability on campus (Institution) Research methods used: video diaries and interviews

The third example is from recent research examining the ways and extent to which the university campus impacts on students' understanding of sustainability through informal learning experiences. This project was developed in response to increasing interest in the relationship between different curriculum dimensions and education for sustainable development (Jones, Selby, & Sterling, 2010) and illustrates the ways in which, particularly with sustainability, there is potential for what happens outside the classroom challenge what students are formally taught. Institutions often conduct aspects of their business and estates management in an unsustainable manner, for instance through poor energy management in buildings, lack of recycling facilities or the operation of procurement policies that prioritise cost effectiveness over issues such as fair trade or local and organic food products. Several authors argue that such contradictions result in students receiving discordant messages about sustainability (e.g. Djordjevic & Cotton, 2011; Hopkinson, Hughes, & Layer, 2008; Sterling, 2001). This tension between campus and curriculum has been used to advocate the whole institutional approaches to embedding education for sustainable development which have been pioneered in different formats at the Universities of Bradford (Hopkinson et al., 2008), Gloucester (University of Gloucester, 2009) and Plymouth (Jones et al., 2010). Nonetheless, there is still much work to be done at these institutions to ensure that sustainability permeates all aspects of university life.

The research in question employed an instrumental case study approach (Stake, 1995) focusing on a leading sustainability university. Using a broadly ethnographic approach and drawing on students as participant observers in their everyday context, the researchers obtained video diaries of sustainability as manifested in the campus environment and utilized semi-structured interviews using stimulated recall. The student researchers were asked to walk around campus and record their experiences on video with a commentary.

They were also asked to interview other students on video to elicit their views about sustainability on campus. The benefit of using students as researchers was that it provided a first-hand account of their views on the university campus, in contrast to the more widely reported views of academics or sustainability managers. Students responded well to the medium and the approach of combining observations with interviews provided a relatively undiluted, if not necessarily natural, focus on the student perspective. The student researchers were subsequently interviewed, using stimulated recall through clips from the video-diaries, about their experiences in order to elicit a detailed account of their perspectives and reflections on the research. Undertaking the videos enabled participants to identify evidence about sustainable and unsustainable practices in the university campus. They were also encouraged to reflect on their experiences and make connections between sustainability discourses presented in the classroom and the implementation of sustainability related initiatives within a large organization. This process generated critical dialogue about rhetoric and practice and, in some cases, was transformative for participants who reviewed their own perspectives and behavioural responses to sustainability issues. The research methods in this case proved to be a useful pedagogic vehicle for enhancing students' capacity to critique sustainability within an organization in transition (Mackie & Jones, 2010) and highlighted the tensions that exist between the formal curriculum and what students learn informally through the institutional environment.

#### Conclusions

The purpose of this paper has been to explore some of the benefits and pitfalls of different approaches to researching the hidden curriculum in higher education. Unsurprisingly, given the indistinct and subjective nature of the hidden curriculum, none of the research methods examined completely evade the hazards of navigating researcher preconceptions or the incomplete recollections and different interpretations held by "providers" and "recipients" of the hidden curriculum. However, experiences of research in this area generally lead towards the use of qualitative techniques and triangulation (particularly methodological and participant) to capture the meanings ascribed to events and situations by research participants. In particular, stimulated recall through the use of video diaries and observations proved useful in encouraging participants to recall and discuss specific elements of the hidden curriculum and their impact on both formal teaching practices and broader educational experiences.

The three examples given illustrate a range of ways in which pedagogic research can help to render the hidden curriculum more visible and comprehensible. Research in this area is unquestionably complex, not least because the hidden curriculum is not a singular concept but, rather, encapsulates a diversity of premeditated, inadvertent, transmitted and received "lessons" that intersect and co-exist with the formal aims and learning outcomes of degree courses across a multiplicity of disciplines and institutions. As such, researchers are inevitably forced to focus on particular facets of the hidden curriculum (in our case, sustainability) and particular contexts while at the same time being conscious that the foci, methods and research locations selected all involve elements of selectivity and, arguably, conscious or unconscious agendas that may influence the ways in which the hidden curriculum is construed and comprehended.

That said, the wider institutional and political changes currently shaping higher education make a clearer understanding of the "contemporary" and evolving hidden curriculum that are highly valuable and important part of understanding and managing educational processes. The impacts of these changes on geography as a discipline are



difficult to predict, but it is worth reflecting on geography's variable funding status under the classification of STEM subjects (science, technology, engineering and mathematics), which, among other things, impact on teaching and staff-student ratios and hints at broader political (and institutional) influences on the curriculum through the expansion, contraction and refocusing of funding. Another topical area concerns the employability agenda, which has both placed pressure on curriculum time and shaped the orientation of degrees. New university fee structures and the trend towards more "enterprising" and partnership-oriented higher education institutions are equally constitutive of new rules for higher education affecting geography—and other less explicitly vocational disciplines. Further research into this area might profitably focus on the impact of changes to the funding climate and students' perspectives resulting from the increasingly consumer model being applied to higher education. One might plausibly suggest that the current changes may impact even more deeply on the hidden curriculum as certain disciplines and particular key skills are viewed as being more important than others. Given these pressures on higher education, a clearer understanding of the nature and impact of the hidden curriculum is crucial to how disciplines like geography shape their future.

#### References

- Ahola, S. (2000). Hidden curriculum in higher education: Something to fear or to comply to? Paper presented at the innovations in higher education conference, September 2, Helsinki.
- Anderson, T. (2001). The hidden curriculum in distance education: An updated view. *Change*, 33, 28–35
- Anderson, T. (2002). Revealing the hidden curriculum of E-learning. In C. Vrasidas & G. V. Glass (Eds.), *Distance education and distributed learning* (pp. 115–133). Greenwich, CT: Information Age Publishing.
- Apple, M. W. (1980). The other side of the hidden curriculum: correspondence theories and the labour process. *Journal of Education*, *162*, 47–66.
- Apple, M. W. (1990). *Ideology and curriculum*. London: Routledge.
- Apple, M. W., & King, N. P. (1977). What do schools teach? In R. H. Weller (Ed.), *Humanistic education* (pp. 29–63). Berkley, CA: McCutchan.
- Argyris, C., & Schön, D. A. (1974). Theories in practice. San Francisco, CA: Jossey Bass.
- Bailey, I. (2007). Climate policy implementation: Geographical perspectives. Area, 39, 415-417.
- Bailey, I. (2008). Geographical work at the boundaries of climate policy: A commentary and complement to Mike Hulme. *Transactions of the Institute of British Geographers*, 33, 420–423.
- Ball, S. (1990). Markets, inequality and urban schooling. *The Urban Review*, 22, 85–100. Barnett, R. (2000). Supercomplexity and the curriculum. *Studies in Higher Education*, 25, 255–265.
- Bloom, B. S. (1953). Thought processes in lectures and discussions. *Journal of General Education*, 7, 160–169.
- Bloom, B. S. (1972). Innocence in education. School Review, 80, 333-352.
- Bowles, S., & Gintis, H. (1976). Schooling in capitalist America. New York: Guildford Press.
- Brandt, G. L. (1986). The realization of anti-racist teaching. London: Falmer Press.
- Castree, N. (2006). Commentary: From neoliberalism to neoliberalisation: Consolations, confusions, and necessary illusions. *Environment and Planning A*, 38, 1–6.
- Cotton, D. R. E. (2006a). Teaching controversial environmental issues: Neutrality and balance in the reality of the classroom. *Educational Research*, 48, 223–241.
- Cotton, D. R. E. (2006b). Implementing curriculum guidance on environmental education: The importance of teachers' beliefs. *Journal of Curriculum Studies*, *38*, 67–83.
- Cotton, D., Bailey, I., Warren, M., & Bissell, S. (2009). Revolutions and second-best solutions: Education for sustainable development in higher education. *Studies in Higher Education*, *34*, 719–733.
- Cotton, D. R. E., Warren, M. F., Maiboroda, O., & Bailey, I. (2007). Sustainable development, higher education and pedagogy: A study of lecturers' beliefs and attitudes. *Environmental Education Research*, 13, 579–597.
- Cotton, D. R. E., & Winter, J. (2010). 'It's not just bits of paper and light bulbs': A review of sustainability pedagogies and their potential for use in higher education. In P. Jones, D. Selby &

- S. Sterling (Eds.), Sustainability education: Perspectives and practice across higher education (pp. 39–54). London: Earthscan.
- Cousin, G. (2009). Researching learning in higher education: An introduction to contemporary methods and approaches. London: Routledge.
- Djordjevic, A., & Cotton, D. R. E. (2011). Communicating the sustainability message in higher education institutions. *International Journal of Sustainability in Higher Education*, 12, 381–394.
- Dunphy, A., & Spellman, G. (2009). Geography fieldwork, fieldwork values and learning styles. *International Research in Geographical and Environmental Education*, 18, 19–28.
- Edwards, D., & Mercer, N. (1987). Common knowledge: The development of understanding in the classroom. London: Routledge.
- Edwards, A. D., & Westgate, D. P. G. (1994). *Investigating classroom talk*. London: The Falmer Press.
- Fuller, I., Edmondson, S., France, D., Higgitt, D., & Ratinen, I. (2006). International perspectives on the effectiveness of geography fieldwork for learning. *Journal of Geography in Higher Education*, 30, 89–101.
- Giroux, H. A. (1983). Theories of reproduction and resistance in the new sociology of education: A critical analysis. *Harvard Educational Review*, 53, 257–293.
- Hargreaves, D. (1967). Social relations in the secondary school. London: Routledge and Kegan Paul.
- Hargreaves, D. (1978). Power and the paracurriculum. In C. Richards (Ed.), *Power and the curriculum: Issues in curriculum studies* (pp. 97–108). Driffield: Nafferton.
- Healey, M., & Jenkins, A. (2000). Kolb's experiential learning theory and its application in geography in higher education. *Journal of Geography*, 99, 185–195.
- Hope, M. (2009). The importance of direct experience: A philosophical defence of fieldwork in human geography. *Journal of Geography in Higher Education*, 33, 169–182.
- Hopkinson, P., Hughes, P., & Layer, G. (2008). Sustainable graduates: Linking formal, informal and campus curricula to embed education for sustainable development in the student learning experience. *Environmental Education Research*, 14, 435–454.
- Jackson, P. W. (1968). Life in classrooms. New York: Holt, Reinhart and Winston.
- Jones, P., Selby, D., & Sterling, S. (2010). Sustainability education: Perspectives and practice across higher education. London: Earthscan.
- Kentli, F. D. (2009). Comparison of hidden curriculum theories. European Journal of Education Studies, 1, 83–88.
- Lacey, C. (1970). Hightown grammar. Manchester: University of Manchester Press.
- Latour, B. (1987). Science in action: How to follow scientists and engineers through society. Milton Keynes: Open University Press.
- Lynch, K. (1989). The hidden curriculum: Reproduction in education, a reappraisal. London: The Falmer Press.
- Mackie, M., & Jones, P. (2010). *The campus as a learning resource: A briefing paper*. Plymouth: University of Plymouth.
- Malone, K., & Tranter, P. (2005). 'Hanging out in the schoolground': A reflective look at researching children's environmental learning. *Canadian Journal of Environmental Education*, 10, 212–224.
- Margolis, E., & Romero, M. (1998). The department is very male, very white, very old and very conservative: The functioning of the hidden curriculum in graduate sociology departments. *Harvard Educational Review*, 68, 1–32.
- Mullard, C. (1982). Multi-racial education in Britain: From assimilation to cultural pluralism. In J. Tierney (Ed.), *Race, immigration and schooling* (pp. 120–133). London: Holt International.
- Portelli, J. P. (1993). Exposing the hidden curriculum. *Journal of Curriculum Studies*, 25, 343–358.
   Purvis, S. & Grainger, A. (Eds.). (2004). *Exploring sustainable development: Geographical perspectives*. London: Earthscan.
- Skelton, A. (1997). Studying hidden curricula: Developing a perspective in the light of post-modern insights. *Pedagogy, Climate and Society*, *5*, 177–193.
- Snyder, B. R. (1971). The hidden curriculum. New York: Knopf.
- Stake, R. E. (1995). The art of case study research. London: Sage.
- Stanworth, M. (1981). Gender and schooling. London: Hutchinson.
- Sterling, S. (2001). Sustainable education: Re-visioning learning and change. Totnes: Green Books.



- University of Gloucester (2009). Education for sustainability framework for the University of Gloucester., Retrieved from http://www.glos.ac.uk/about/sustainability/education/Pages/efs.
- Vallance, E. (1980). The hidden curriculum and qualitative inquiry as states of mind. *Journal of Education*, 162, 138–151.
- Willis, P. (1978). Learning to labour. New York: Colombia University Press.
- Yinger, R. J. (1986). Examining thought in action: A theoretical and methodological critique of research on interactive teaching. *Teaching and Teacher Education*, 2, 263–282.