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‘He talks to you, not at you’: Attending to learners’ perspectives to enhance understanding of accomplished teaching

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Abstract

The voices of students can make a significant contribution to understanding what constitutes accomplished teaching (Flutter, 2007). Young people give cogent and significant views about their learning, providing important insights for improving teaching (Rudduck, McIntyre, & ESRC Teaching and Learning Programme., 2007). Using a qualitative approach, the perspectives of consequential stakeholders, that is the students, (Groundwater-Smith, 2005) are analysed to canvas their views of accomplished teaching. Thirty-four students ranging from year 7 to year 12 in eight schools in three Australian states were interviewed using post lesson video-stimulated recall. Interview data were open coded allowing the categories to emerge. This research arises from the Strengthening Standards of Teaching project (in progress) in which standards for the teaching of geography will be developed.

The focus of this paper is on learners’ perspectives of seventeen classroom learning experiences. It describes the major themes, patterns and ideas that have emerged and draws out implications for teacher education. This study found that several features emerged which positively influence student learning. These were including interactive teaching, contextualising learning, inclusion of collaborative learning approaches, timely individual assistance and explanatory clarity.

Keywords: quality teaching, student voice, pupil voice, learner perspective

Introduction

This paper reports on one component of a larger research project in which students are asked to identify what influences their learning with respect to particular lessons. It arises from the Strengthening Standards of Teaching project (in progress) whose research design is based on the conceptual approach of complementary accounts (Clarke, 2001; Clarke, Keitel, & Shimizu, 2006) whereby videos of accomplished classroom teachers are used to study how teachers and students negotiate and articulate the meaning of accomplished teaching. Although the research is situated within the subject area of post-primary school geography education, this paper is held to be of relevance across a wide range of subject areas. The study takes as its focal point what happens inside the classroom, which brings the role of teacher and learner into sharp relief and backgrounds whole school issues.

Attending to learners’ perspectives is an essential constituent of the means by which teachers improve their practice (Flutter, 2007; Hopkins, 2008). Students’ views and opinions have been sought in a range of research initiatives to enhance understanding of teaching and learning, most notably in the Consulting Pupils about Teaching and Learning Project (Rudduck et al., 2007). Student voice, synonymous with pupil voice, comprises all methods of enabling students to give their views (Flutter, 2007;

Whitty & Wisby, 2007). In parallel to student voice other researchers have explored learners' perspectives (Clarke, 2006; Hopwood, 2007, 2008). For some the term learners' perspectives is self-explanatory and needs no definition (Hopwood, 2008). Clarke's long term international Learner's Perspective Study (LPS) focuses on the **perspectives** of learners in mathematics classrooms and more recently in science classrooms as one key element of multiple data sources which can support more complex understandings of classrooms. LPS has served to associate learners' perspectives with numerous studies which involve student analysis of videoed classroom lessons (Clarke, 2006; Williams & Clarke, 2002). Although there is minimal intersection between student voice and learners' perspectives research, the concepts are aligned, both seeking to view learning through students' eyes. Where the concepts differ is that student voice research is more singularly focused on students and on the whole explicitly seeks to enhance student agency (Groundwater-Smith, 2005) yet enhancing agency is not an explicit feature of learners' perspectives study. Within and beyond the field of student voice literature, there are many different frameworks for categorising the type of interactions between researchers and participants (Whitty & Wisby, 2007). Consultation and participation are two useful categories. Consultation, which underpins this study is talking to students whereas participation refers to a deeper level of activity by students who will be involved in research processes (Rudduck et al., 2007).

This paper aims to make a small contribution to the knowledge base of what enhances student learning through analysis of students' views about teaching and learning. Situated within a *teaching improvement* orientation, the research does not consider broader orientations to student voice such as children's rights or active citizenship which put forward the view that student voice ought to be linked to action, and that students should actively participate in making decisions about their school and learning (Holdsworth, 2005). Nor does it attend to the perspectives of students who have special needs, although this is an important area of research in student voice.

Attending to research on the themes arising from in-depth interviews with students can enhance understandings of teaching and learning augmenting the many informal ways that teachers can and do attend to students' learning. Teachers interpret students' non-verbal cues, respond to student questions and ask questions of students, listen to and build on contributions during discussion, probe points of confusion, examine work in progress and assess products of learning. Teachers may informally ask their students to comment on the efficacy of a lesson or activity. Counter to this, teachers may adhere to comfortable routines, dismiss feedback or only heed viewpoints which accord with their stance (Groves, 2007). As well, teachers major concern is with the overall flow of the lesson, not the needs of individual students (Hargreaves, 2000). Nonetheless directly asking students what influences their learning can lead to profound development in teaching by recalibrating the relationship between teacher and students. Accordingly student voice research has the 'power to unlock the shackles of habit that so often bind teachers to their familiar routines of practice and thought' (Flutter, 2007, p. 352).

Key features identified by students as helping them to learn synthesised from other studies situated in student voice literature and limited to a secondary school context are:

1. Interactive or active learning including the use of practical experiments that students associate with learning science (McIntyre, Pedder, & Rudduck, 2005; Mitsoni, 2006; Whitehead & Clough, 2004; Wood, 2003). Teachers are able to make use of students' ideas and enable students to construct their own understandings (Wallace, Rudduck, & Chaplain, 1996). This includes involving students through questioning and discussion.
2. Connection of content with their everyday lives through tasks which link new ideas with things that they know. Learning is contextualised in ways that connect with young people's experiences (Groves, 2007; McIntyre et al., 2005; Mitsoni, 2006; Plaut, 2006; Wood, 2003).

Pupils seemed to be telling their teachers in concrete ways and with clear examples how the authenticity of their learning experiences could be enhanced by bringing tasks into closer and more striking alignment with the mental and social worlds that they inhabit both inside and outside the classrooms. (McIntyre et al., 2005).

3. Giving greater responsibility for learning to the students (Mitsoni, 2006). McIntyre et al. describes this as providing students with a greater sense of agency and ownership (2005) through giving students' choices in tasks, student-centred inquiry approaches, and with concomitant trust in students' willingness to manage their own learning. Thus Rudduck et al. aptly ask: do students have control over learning — choice in content, in activities, in the pace of their learning (2007)?
4. 'Arranging social contexts amenable to collaborative learning' (McIntyre et al., 2005, p. 149), involving activities including working in pairs or groups so that meaning can be developed through talk (Wood, 2003). Support from peers within positive social settings is important but this can also be a barrier when young people are not able to work well together (Rudduck et al., 2007).

These four features are in part drawn on to frame the results of this study, although timely individual assistance emerged as a fifth feature. Groves (2007) identifies individual attention as a means to develop positive teacher-student relationships and as well a key theme in meeting students' individual needs. Many participants in this study identified how this boosted their learning.

The study: Data and methods

Teachers of the lessons were recruited by asking teachers who were widely regarded as accomplished teachers within the field of geography education. For each of ten classrooms in eight schools in Victoria, South Australia and New South Wales (Years 7 to 12), two lessons, each lasting around 50 minutes, were videotaped using three cameras. One camera focused on the teacher. The other cameras focused respectively on individual learners who were subsequently interviewed; and the whole class as seen from the front of the room. The researcher took field notes during each lesson, observing verbal and non-verbal cues of learning which might enable more nuanced probing during interviews. Thirty-four students who had participated in these lessons were interviewed using post lesson video-stimulated recall on the day of the lesson.

Students viewed dual screen video footage of teacher and themselves and were asked a series of semi-structured questions focussed on ‘what influenced your learning?’ Each interview lasted between 15 and 40 minutes depending on the involvement of the student.

Two or three students were interviewed from each lesson. They were usually a girl and a boy from a range of performance levels within each class who were comfortable to be interviewed. The researcher requested that teachers guide the selection of student two or three students who generally perform at different levels in the class recognising that who gets to speak is likely those with cultural capital who are advantaged by school and consequently may speak favourably of the status quo (McIntyre et al., 2005; Noyes, 2005). Students were explicitly made aware that I sought and valued their crucial insights as highly skilled participants in the project (Hopwood, 2007). Recognising that participants may be inhibited in their responses, and complying with research ethics to protect confidentiality of information provided in a dependent relationship, the recordings and transcripts of student interviews were not made available to their teachers. However this ruptures the opportunity for teachers to directly engage with a data set which has significant potential to inform improvements in their practice. Summaries of aggregated data will be shared with the class teachers involved. Pseudonyms have been assigned to participants to maintain their anonymity. Student participants expressed eagerness to be involved and afterwards said they appreciated of the opportunity to think about and discuss their learning – and that the process affirmed the worth of their views.

This paper is qualitative, and employs grounded theory (Corbin, Strauss, & Strauss, 2008). After careful and multiple readings of the transcripts of student interviews, identification and subsequent clustering of related responses was refined to produce a set of categories (Patton & Patton, 2002). Some comments were classified as belonging to more than one category and careful attention was paid to identify recurring relationships between categories. My analysis of the data is influenced by my ability to recognise different expressions of similar elements and my understanding of teaching and learning.

Limitations

The design of this study had limitations as the sample is small and situated in geography classrooms. I do not claim to have interviewed a comprehensive range of participants. This is a particularly cautionary tale as there is evidence that high attainment students and low attainment students have different learning preferences (Flutter, 2007). I was mindful that it was difficult not to privilege some student responses through verbal and non-verbal feedback during interview thereby shaping subsequent responses. Getting to the heart of what students mean is challenging and the semi-structured protocol provided space to clarify initial responses. Further, Noyes captures the challenge of listening in ways that go beyond filtering only what is recognisable in this succinct sentence ‘voices are nothing without hearers’ (2005). What did I hear, select from the transcripts and how do I make meaning of this? The question of what students can’t say remains for other research designs to explore. I continue to ask myself do students describe only the best of their learning experiences, as they have no experience of revolutionary approaches. That is they describe common practices of teaching which are deeply socialised forces because

this is all they know, and these become the parameters by which learning can be imagined. Notwithstanding these limitations, this design and analysis provides participants' views on what influences their learning.

Results

Many insights emerged from this study. At a meta-level the researcher noticed that many students fixed their attention on to the video screen of the teacher during the interview suggesting that they believed that the teacher's actions would provide evidence of what influenced their learning. Much is written about the shift in schooling from teacher-centred to student-centred orientation yet students instinctively looked to the teacher as the key influence in their learning. Students recognised the key impact teachers have on learning but does this overshadow their own agency? At a second level, and often only after prompting, they then attended to the contribution of their peers to their learning and more rarely considered their own efficacy in controlling their learning. Students did exhibit metacognitive knowledge of their learning and this was more prevalent in interviews with older participants which accords with Wall who reported that metacognitive knowledge was common in older students (2008).

The following analytic categories emerged strongly. Quotes from interviews are presented to invite you to hear students' voices towards co-constructing views of learning (Whitehead & Clough, 2004).

INTERACTIVE TEACHING

Questioning and discussion

Questioning and discussion are related and overlapping expressions and consequently were difficult to separate. Questioning is part of the means of developing a discussion. Discussion makes it possible for learners to hear ideas in their peer's vocabulary, interact with everyone in the class and challenges students' and teachers thinking. Class discussion was commonly mentioned as being important to learning as it produced more interest, enabled students to learn from peers, encouraged active participation and made thinking visible.

... I really like the way that she leads her discussions; it's not all about her talking to us. She encourages; if there are some quiet ones at the back, she asks 'what about you?' and she dubs people in, which is good because she's got a good relationship with them, they don't get grumpy with her, it gets them all involved. Jane

...listening to other people talk about it was quite helpful, because I had some different views to what they were saying, so it was good to hear what everyone else had to say. Zoe

Questioning was identified as playing a key role in learning. It can enable teachers to diagnose understanding and invites everyone to think. It makes thinking visible to teacher and learners. Good questioning necessitates listening, and at its best provides

an interactive approach to learning. In the following section, students talk about questioning in whole class discussion and instructional parts of lessons.

Thus monologues where teacher is not checking students understanding and engagement were seen as an antithesis of questioning

...she's not just always waffling on. Jane

and answering questions was a shared role:

...if someone asks a question, she may answer, or she may ask the class like 'does anyone know what this is?' Tim

Questioning which involved everyone was important.

[Responding to a question asking what the teacher did well] ...the way she involves the whole class, it's not just people with their hands up, sometimes she chooses someone who is not really becoming involved, just to involve them. David

Students acknowledged that they learn from their peers as well as their teacher.

...like if the teacher asks the question and then another student puts their hand up, it's most of the time (you) focus on what that person has to say and comment. Normally you would learn from it, I guess learning from students as well as – like say a student could say something that you didn't know, and you can learn from that as well as learning from what the teacher is saying. David

I didn't really understand until another student asked a question. Brigitte

The teacher draws on students' understanding in questioning and facilitating their meanings so that learning is situated in their world, and in their language.

...we started discussing it as a group. ... I think it's easier having kids putting it into kids' words, so it's easier to understand, and I think people listen more and understand it rather than if they just read it off a sheet. Nathan

Questioning in individual and small group situations

Questions from students to their teacher and peers were commonplace in the lessons filmed particularly during student-centred activities. In the quotations that follows, where the issue under discussion is what the teacher does when s/he presents at students' tables to talk over their individual and group work, it is clear that the student feels safe to ask questions and acknowledges that the teacher will not supply quick answers although directional probes are provided.

He kind of looks at our graphs, and you can kind of tell on his face if I was doing something wrong or not, and he just gives us some ideas and makes sure that everything is going well. It's good because you can always ask him

questions, like I am never scared to ask him a question. ...he will give you — not the answer but something that will lead you to the answer...— or something that will help. Lauren

Similarly the teacher's avoidance of giving answers challenged students to think.

Asking a lot of questions [was helpful in assisting me to understand] I think, because she got us to answer it ourselves, but asked questions that kind of hinted at the answer, and if we didn't know she kept giving us more ideas, but she wouldn't tell us the answer, she made sure someone answered it. That was good. Brigitte

Thinking is challenged by sustained questioning and also by asking that responses are justified.

Even with examples, like when girls give answers, when he asks for answers, he also asks for justification, so that's a good way to sort of work through things and I enjoy listening to what other people have come up with and put in my own input sometimes. He does ask us a lot of questions, but I reckon that's good, it's stimulating. Evangeline

CONTEXTUALISING LEARNING

Students identified a number of connecting features which helped their learning. Making links to prior learning and providing opportunities for students to make connections with their experiences and peers experiences were important. This frequently occurred during discussion. Contemporary links to current world events was mentioned. Students also liked teachers who used 'stories'. Sometimes these were stories designed to personalise abstract concepts. More commonly stories were when the teacher told personal accounts of their life experiences which related to the lesson. This resonated with students at an interpersonal level giving insights to the teacher. As well, teachers' personal stories may serve to demonstrate the benefit of the topic and make visible a component of how the teacher has constructed their knowledge.

I think that because he has done a lot of things in his life, he always has a story to tell us about, when he was in America ... so he always relates things to his life, and sometimes it's really interesting because you don't know these things about teachers because he has actually done quite a lot of stuff that we don't really know about. Shannon

INCLUSION OF COLLABORATIVE LEARNING APPROACHES

A majority of participants identified how peers assist their learning. Pair and small group work was favoured as students have access to other people's ideas, can discuss their learning and check their progress without waiting for the teacher. It was a strong learning preference for some participants.

I think it's [pair and small group work] definitely beneficial, because obviously two people together, you're going to have more ideas than one person by themselves. It balances your ideas and stuff. Annette

... I usually sit with my friend, and we usually get it [work] done together, but my two other friends pretty much know what they're doing, so I always go to them and check, just in case. Cleo

With respect to the role of other students in assisting individuals' learning, three students commented thus:

Another thing that like helps you learn is when you're working in partners. Working in partners you can kind of talk about what your thoughts on the actual thing are. Like if you're working on your own, you're not allowed to talk or anything, it's kind of harder to relate. Like obviously if we were told today we could work in partners, so you could kind of, when you found something, or discovered something, you could say it to your partner and you could work on that together for a bit. ...I think it's just easier to ...than just keeping it all into yourself, if you get someone else's opinion, or if you might not be sure on something, if you get someone else's opinion you can determine whether you're right or wrong. David

That was important to my learning; I am not sure about everyone else though. I think that would be when my friend and I were talking, we were up to this question....because we got different answers, which is really important I think having someone there to talk it through with, even though the teacher wasn't necessarily interacting with us. My learning bounced off my friend and vice versa. Evangeline

I would rather [be] working with other people than working by myself, because you get to interact with other people and you get more of an idea of what other people are thinking about it. Shannon

However working together did not help every student's learning; three participants also strongly stating that their preference is to work alone because they can complete tasks more efficiently without distraction. Some favoured individual tasks to avoid the risk of public criticism. Working with less motivated peers was described as frustrating and group activities did not enable individuals to work at their preferred pace. This variation in the data is important to highlight as learning preferences are different and consequently it is only through wide consultation that the complexity of influences of learning can be explored.

You really have to cater for all sorts of people, I would rather work on my own personally, but I know others would rather work in a group, because they are not exactly sure what the topic would be about, or they just enjoy working with their friends, ...but you're open to more ridicule. Sort of, no one else wanted to write and then when you do go to write, someone else is always going to say 'that's not right' or 'your handwriting is sloppy' or something like that, so I would rather work on my own work. The only person to critique it is a teacher and they've got every right to. ...some people put in more than others, and that's

what I don't like. If I am given a piece of work, I would rather commit to it, whereas someone else, like my classmate who sits back just chewing his nails, whereas the other three are all working, so you just mooch off the group, and I think it's a bit soft. Riley

TIMELY INDIVIDUAL ASSISTANCE

Frequently this was colloquially expressed as walking around the classroom, this was a recurring feature discussed by students for multiple reasons. Students were able to access help as they needed it and it demonstrated that the teacher was approachable which likely contributed to the development of productive teacher – student relationships. Teachers were monitoring individual's progress, checking understanding, helping, offering praise, encouragement and affirmation that the student is on track. On the contrary, teachers who didn't do this were described as poor teachers.

Also I think it's good ... that (she) kind of walks around the classroom, and sees if you're going alright or have any problems, rather than just sitting up the front waiting for everyone to finish. It's good. ...[She is also] checking that you're working properly. Yeah, just checking that you understand it all. Riley

If you really don't understand something and he is coming around, you just wait and then he will come and he will explain it and then you can get on with your work again. Zoe

He goes around and checks what you're doing, so we are not just left to come up with our own equations and solutions, like he will sort of monitor it kind of thing, and I think that's really important, because a lot of the time, you can just go about doing your own answers, you rush through them in class, and then if you've got them wrong, you don't necessarily know where you got it wrong, so I think it's good that he did come around to us. Evangeline

Not only is the teacher assisting individuals but monitoring how her knowledge of difficulties faced by individuals can benefit the whole group.

It's good because if anyone has a query on anything she will go and help them, and if she thinks that it's relevant for the whole class, she stops everyone and says 'there's a good point here, just remember to such and such' which is really good because often it does apply to everyone. ...When we're doing our own thing she doesn't sit back and work or something... Sometimes, [other teachers] might say, 'alright you can do this activity now, so just get on with that for the next ten minutes'. And they might be marking or whatever. But I have never seen this teacher do that, apart from when we've got a test because it's silence, but she is always walking around and checking that everyone is fine, and 'do you need help with this?' and 'Oh, that's good I like that,' and then sharing things with the class, so I really like that she teaches like that. I think it's very helpful. ...it's less threatening I suppose, you don't have to be 'oh, can I have some help?' because she is already there for you. Jane

EXPLANATORY CLARITY

Participants commented that the teacher's ability to explain effectively was central to their learning. This is exemplified in the following quotes:

Just explaining everything really well, and answering a lot of questions and stuff. Tim

He just explains stuff so well, that it just makes sense... Annette

The way the teacher, compared to other teachers, she sits down and goes 'right, who doesn't understand and who does?' and if we don't, she's never like 'you should know this, you should be able to do this,' she always goes 'right, OK. This is how you do it; this is how you should be doing it, now is everyone OK?' And then she makes sure that everyone's right with it, and that it's pretty self explanatory and straight forward. Cleo

Both persistence in explaining and using different approaches to explain were aspects identified as helpful.

She explains it in different ways all the time, because some people understand things when you say it differently, so she explains it differently to make sure that we all understand it. Sam

Explaining a concept or a task so that students understand is the product of a complex set of factors which are not articulated in these interviews. A combination of teachers knowledge of the area they are teaching, their understanding of the structures of their discipline, their repertoire of pedagogy and capacity to select and design learning effective learning experiences all contribute to capacity to explain. Knowledge of their students and their communication skills also contribute. By attending to students questions teachers are able to craft explanations that work. Much underlies the act of explaining.

Conclusion

The data provide insights into elements of classroom practices which influence learning. Yet in the fragmenting of these conversations with young people it is wise to be mindful that it is only in the blending of elements that a holistic vision of teaching and learning is possible.

Listening to these students speak of their learning does provide a small contribution to the potential to improve teaching and learning by highlighting the importance of incorporating interactive teaching approaches, contextualising learning, including collaborative learning approaches, providing timely individual assistance and achieving explanatory clarity. These results indicate a noteworthy preference among students for a constructivist learning approaches. The feature of timely individual assistance is important as it was a recurring feature students identified but there is no mention of it in similar studies, with the exception of Groves' (2007) research and incidental discussion in Plaut (2006). Underpinning the features identified in this

study is the commitment of the teacher to take an interest in young peoples' lives, the pedagogic knowledge of, and the will and motivation to improve their practice.

I should like to fittingly conclude by offering the last word to a Year 12 student who eloquently portrays the complex features of one effective teacher invoking a teacher who is deeply knowledgeable in his field, who effectively listens and responds, encourages students to learn in ways that work for them and has developed a relationship that is based on mutual respect.

Everything he does I think [helps me understand during the lesson]. I find him a really effective teacher. I learn really well when he is my teacher. From like explaining the diagrams, like working through them. He talks to you, not at you which I find is really helpful, he engages you in a conversation rather than a lecture, and I think that's really helpful because then if you don't understand something, you can simply just butt in and he will clarify it for you. I think that's particularly effective, not just for myself but for quite a few girls in the class. Again the open method of learning, where it's not copying things from a textbook on to the board, which then girls copy into their own note books. The way he teaches allows you to learn the way you want to learn. For example when I take my notes I am able to elaborate on them so that they suit me. And I think that's really effective, so they're not in his words but in my own words, but I am still getting the concepts across.

Implications for teacher education

The features generated in this study may provide a useful framework for conversations about the ways that teaching and learning can be improved for beginning and ongoing teachers. Incorporating systematic ways of including young peoples' perspectives on their learning in initial teacher education will enable future teachers to be familiar with the potential of attending to the needs of the consequential stakeholders so that they can continue to improve their practice. Pre-service teachers are routinely asked to reflect on their practice. The reflective potential could be enhanced through the systematic collection of feedback from learners to inform their own practice (Groundwater-Smith & Mockler, 2003). This might be through inclusion of assessment tasks which ask pre-service teachers to collect and analyse oral or written feedback from learners who they teach.

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References

- Clarke, D. (2001). *Perspectives on practice and meaning in mathematics and science classrooms*. Dordrecht ; Boston: Kluwer Academic Publishers.
- Clarke, D. (2006). *Making connections : comparing mathematics classrooms around the world*. Rotterdam: Sense Publishers.
- Clarke, D., Keitel, C., & Shimizu, Y. (2006). *Mathematics classrooms in twelve countries : the insider's perspective*. Rotterdam: Sense Publishers.
- Corbin, J. M., Strauss, A. L., & Strauss, A. L. (2008). *Basics of qualitative research : techniques and procedures for developing grounded theory* (3rd ed.). Los Angeles: SAGE Publications.
- Flutter, J. (2007). Teacher development and pupil voice. *Curriculum Journal*, 18(3), 343 - 354.
- Groundwater-Smith, S. (2005). The everyday neglect of student voice in our schools, *Contemporary Questions in Curriculum Seminar Series*. Faculty of Education, University of Melbourne.
- Groundwater-Smith, S., & Mockler, N. (2003). *Learning to listen : listening to learn*. [Sydney]: Distributed by Division of Professional Experiences, Partnerships and Development, Faculty of Education Social Work [sic], University of Sydney.
- Groves, R. (2007). High school students' views of learning and the school experience, *Australian Association for Research in Education*. Perth.
- Hargreaves, A. (2000). Four ages of professionalism and professional learning *Teachers and Teaching: Theory and Practice*, 6, 151–182.
- Holdsworth, R. (2005). Taking Young People Seriously Means Giving Them Serious Things To Do. In J. Mason & T. Fattore (Eds.). London: Jessica Kingsley Publishers.
- Hopkins, E. A. (2008). Classroom conditions to secure enjoyment and achievement: the pupils' voice. Listening to the voice of Every child matters. *Education 3-13*, 36(4), 393 - 401.
- Hopwood, N. (2007). Environmental education: pupils' perspectives on classroom experience. *Environmental Education Research*, 13(4), 453-465.
- Hopwood, N. (2008). Values in geographic education: the challenge of attending to learners' perspectives. *Oxford Review of Education*, 34(5), 589 - 608.
- McIntyre, D., Pedder, D., & Rudduck, J. (2005). Pupil voice: comfortable and uncomfortable learnings for teachers. *Research Papers in Education*, 20(2), 149-168.
- Mitsoni, F. (2006). 'I get bored when we don't have the opportunity to say our opinion': learning about teaching from students. *Educational Review*, 58(2), 159-170.
- Noyes, A. (2005). Pupil voice: purpose, power and the possibilities for democratic schooling. *British Educational Research Journal*, 31(4), 533-540.
- Patton, M. Q., & Patton, M. Q. (2002). *Qualitative research and evaluation methods* (3 ed.). Thousand Oaks, Calif.: Sage Publications.

- Plaut, S. (2006). 'I Just Don't Get It': Teachers' and Students' Conceptions of Confusion and Implications for Teaching and Learning in the High School English Classroom. *Curriculum Inquiry*, 36(4), 391-421.
- Rudduck, J., McIntyre, D., & ESRC Teaching and Learning Programme. (2007). *Improving learning through consulting pupils*. London: Routledge.
- Wall, K. (2008). Understanding metacognition through the use of pupil views templates: Pupil views of Learning to Learn. *Thinking Skills and Creativity*, 3(1), 23-33.
- Wallace, G., Rudduck, J., & Chaplain, R. (1996). *School improvement : what can pupils tell us?* London: D. Fulton Publishers.
- Whitehead, J., & Clough, N. (2004). Pupils, the forgotten partners in education action zones. *Journal of Education Policy*, 19(2), 215 - 227.
- Whitty, G., & Wisby, E. (2007). Whose voice? An exploration of the current policy interest in pupil involvement in school decision-making. *International Studies in Sociology of Education*, 17(3), 303 - 319.
- Williams, G., & Clarke, D. (2002). *The Contribution of Student Voice in Classroom Research: A Case Study*. Paper presented at the Tenth annual meeting of the Southern African Association for Research in Mathematics, Science and Technology Education, Durban.
- Wood, E. (2003). The power of pupil perspectives in evidence-based practice: the case of gender and underachievement. *Research Papers in Education*, 18(4), 365 - 383.