

## LEARNER AGENCY: A DYNAMIC ELEMENT OF THE NEW ZEALAND KEY COMPETENCIES

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*Human agency may be frail, especially among those with little power, but it happens daily and mundanely, and it deserves our attention. (Holland Lachicotte, Skinner, & Cain, 1998, p. 5)*

### Abstract

Seven years ago *The New Zealand Curriculum (NZC)* was launched with its emphasis on key competencies as “the capabilities that young people need for growing, working, and participating in their communities” (Ministry of Education, 2007, p. 38). This raises the question of what dispositions are required for students to strengthen these capabilities? Curriculum commentators advocate that teachers should monitor how students take risks so that their capabilities are stretched as they perform real tasks in real contexts. The purpose of this paper is to contribute to the ongoing conversation on what key competencies can look like in New Zealand classrooms. Specifically, it focuses on learner agency as an important and undertheorised dispositional element of the key competencies. The paper reports on a discourse analysis that explores how students can act agentically in a secondary classroom. By providing a rich example of learners taking risks in their learning as they enact key competencies, this paper reveals that agency can be both dynamic and unexpected.

### Key words

Agency, teacher professional learning, identity, discourse, life-long learning.

### Introduction

Key competencies are seen as foundational elements that enable students to become lifelong learners who participate fully in the “knowledge economy”. In keeping with the sociocultural approach to learning outlined in the NZC, schools are charged with the task of strengthening students’ key competencies to lay a foundation for lifelong learning. Prominent curriculum commentators using sociocultural theories describe competencies as performative capabilities that learners exercise through their interactions (Carr, 2004; Hipkins, 2010; Hipkins & Boyd, 2011). Embedded in this interpretation are ideas about learning how to learn, dispositional and learner agency (Hipkins, 2006; Carr, 2008). Learner agency is at the heart of these ideas and of the NZC, which aspires to foster “confident, connected, actively involved, and life-long learners” (Ministry of Education, 2007, p. 8). In the New Zealand schooling research literature little attention has been paid, however, to a dispositional notion of learner agency as an important and integral element of the key competencies.

This paper maps a dispositional orientation to the key competencies by exploring what learner agency can look like when enacted by a small group of Year 9 students in a science classroom. In doing so it illustrates a link between agency and the learners’ disposition to learn by demonstrating how students in a secondary classroom can engage as authoritative, active participants, authoring and directing their own behaviour in social activity. Greeno (2006) observes how accounts of learning that use the concept of agency draw attention to aspects of interaction such as crediting students with authorship, with initiating ideas and topics, and challenging or questioning what others say. These relational aspects of agency are used in this paper to illustrate how students can use key competencies authentically when they initiate learning by authoring their own science investigation. After a short review of the relevant literature, which summarises the shift from skills to competencies, the connection between dispositions and agency, and the interrelationship between agency and identity, I outline the research methods used in the study that provided the data for this paper. From there I provide an account of one classroom episode which demonstrates how agency can be both dynamic and unexpected when learning is initiated by learners.

### The shift from skills to competencies

The DeSeCo Project asserts that, due to the increasing complexity of western societies, citizens need more than a narrowly defined skills-based approach to learning (OECD, 2005). The shift from skills to competencies is not a simple translation; it can be a profound change. In grappling with the NZC curriculum change, it may be a temptation for schools to assume that the key competencies are integral to the teaching and learning taking place and that they already address them (Hipkins, 2006, 2012). However, without a focused and holistic approach to competency development that builds on current practice, opportunities may not be realised. Hipkins (2006) cautions that a narrow approach where schools assume that “we already do that” (p. 69) may not support reflection on practices and movement beyond the status quo. Hipkins (2012) also warns that the plain language approach to competencies with their deceptive simplicity may have contributed to superficial readings of their nature and intent. For example, she notes that schools can be cued to view the managing self competency as encompassing traditional and generic behavioural concerns (discipline, attendance, organisation, work readiness, homework completion etc). She argues, however, that managing self involves a wide range of cognitive and metacognitive components that foster students’ learner autonomy. When students self-manage they develop the capacity to act within the big picture of learning by understanding themselves as learners and using this self-knowledge to approach living and learning tasks strategically.

### Dispositions and learner agency

The NZC explicitly states that “key competencies are about developing the dispositions and sense of agency that not only empower the individual but help them better understand and negotiate the perspectives and values of others, contributing towards more productive and inclusive workplaces and societies” (Ministry of Education, 2010, para. 3). Dispositions are relational inclinations (Claxton & Carr, 2004) that dispose learners to interpret and respond to learning opportunities (Carr, 2002). They comprise the capacity to recognise and draw on particular skills, knowledge, and values on different occasions; the responsibility to reflect on what could be important; the motivation to take action; and the know-how to marshal and orchestrate the relevant resources (Carr, 2004). Claxton and Carr (2004) maintain that “there is merit in reading ‘disposition’ not as a noun, as a ‘thing’ to be acquired, but as a verb with qualifying adverbs. One does not ‘acquire a disposition,’ one ‘becomes more or less disposed’ to respond in such-and-such a way” (p. 88). Action oriented, they reflect to what extent students are “ready, willing and able to engage profitably with learning” (Carr, 2008, p. 87).

As an intrinsic part of learning to learn discourse, agency is the student’s capacity to take up learning opportunities in the classroom; engaging the disposition to learn. In a classroom context that is a “potentiating environment”, students can be positioned as competent agents in their own learning (Claxton & Carr, 2004, p. 92). Danby and Farrell (2004) describe an agentic learner as one who is capable and competent to replicate and appropriate aspects of their culture through their talk and interactions with others, thereby actively participating in the construction of their own social situations. It is a central tenet of the research that underpins this paper that, if we want learners to develop the capacity to know what to do when they don’t know (Claxton, 1999), they require opportunities to mobilise the personal and social resources (Davies, 2000) required to take up agentic positions in classrooms.

### Agentic learner identities

Agency is about the power to control how one’s self, identity, relationships, and activities are made and remade on a daily basis (Lewis & Moje, 2003). How learners take up identities as agentic learners is a central issue to the development of key competencies. In the classroom learner identities constantly shift and change through social participation. Tan and Calabrese Barton (2008) conclude that learners are not confined to a single identity as they can remake themselves several times in response to new situations and new opportunities. Lewis, Enciso and Moje (2007) state that rather than being a stable, internal state, identity is a fluid socially and linguistically mediated construct that takes into account the different positions that individuals enact or perform in particular settings. It follows that students can be provided different identities within a classroom as they engage in

learning. Some identities are agentic and learners may, in the interest of these identities, engage in acts of engagement as well as acts of resistance and subversion (Lewis & Moje, 2003).

Next, I outline the discourse analysis method that I used to map the students' moves as they took up agentic learner identities within the classroom discourses.

## Method

Rogers (2011) points out that schools and classrooms are sites where we can study not only the micro-dimensions of classroom talk but also the ways in which social structures are reproduced at macro-levels. The research that underpins this paper aimed to shed light on both the micro and macro level discourses (Anderson, 2009; Gee, 2011) operating within a Year 9 classroom. Put more simply, it aimed to understand the language of the classroom (the micro level discourse) that serves to constitute how learners are positioned within the wider social and academic discourses (the macro level discourse) that the students used to signal identity to each other. Focusing on micro interactions I generated a macro interpretation of how students take up agentic identities as learners in a routine classroom episode.

The participants in the research were teachers and students from a provincial New Zealand secondary school. All participants gave informed consent. To supplement the classroom data, there were student and teacher interviews where the participants viewed and commented on footage of the classroom episode discussed here. The following data, from Jan's Year 9 science classroom, provides an account of the situated dialogue and action that took place at the back of the room. Although Jan had planned a solar energy experiment for the class, a group of students, Blake and his peers, initiated an alternative investigation into the impact of water temperature on a thermometer.

### 'Scientists' at the sink: A classroom episode

After Jan explains to the class how they are to conduct their solar energy investigation, she sends the paired students outside to place three thermometers in a sunny position. They are to cover one bulb with black paper, one with white paper and leave the third uncovered. Most of the students begin to leave the room to set up their equipment. A group of five boys form a splinter group to initiate an alternative investigation. Looking over their shoulders to see what Jan is doing, they move quickly to a sink at the back of the class to run their thermometers under tap water. Almost immediately, two of the boys drift away to join the class outside. However, Thor and Blake continue to run their thermometers under the water. Hone stands beside them watching. The boys lean over the sink and stare intently at the thermometers. From time to time other students come in to see what they are doing and then rejoin the class outside. Below is a brief account of the dialogue and events which take place at the rear of the classroom.

Blake and Thor lean over at the sink running water over their thermometers. Hone stands watching. Thor makes an exclamation and comments on the temperature.

*Thor:* Eh! It's not even moving.

Floyd and Rawiri come over to the sink to see what Thor, Blake and Hone are doing.

*Floyd:* They are cheating.

*Rawiri:* They're cheating! Nah! It's hot water not cold water.

Floyd and Rawiri walk away, grinning and shaking their heads.

Blake and Thor continue to stare intently at their thermometers.

*Blake:* It's staying in the same place.

*Thor:* 60, eh.

*Blake:* Yeah! [Pause] Can you see mine?

*Thor:* Nah, mine was up there [pointing to the red line which is at around 60]. I thought it was ... [inaudible].

*Blake:* Look I'm a scientist I am taking some temperature.

*Blake:* Ahhh! [Gasps and pulls down a paper towel].

Blake adjusts the taps to alter the water temperature and bends over the sink to read the thermometer again. Thor and Hone turn and depart the sink, leaving Blake alone there with the water running over his thermometer.

Floyd and Rawiri return from their solar energy investigation outside. The three boys, Floyd, Blake and Rawiri bend over the sink.

*Blake:* It's dropping, Floyd.

Jan addresses the three boys from the door. Thor moves up to the sink while Jan speaks and places his thermometer under the water.

*Jan:* I have only got one group out there who have done their experiments. Blake! I have only got one group out there who have done their investigation. That's Henare and Floyd.

Floyd and Rawiri quickly return to their respective investigations outside. Thor adjusts the taps. Blake leans right over the sink watching the thermometer as Jan tries to round up the students who are remaining in the room to send them outside. Blake adjusts the taps.

Thirty seconds later Hone comes up to the pair at the sink and pokes Blake on both sides of the ribs to shock him.

*Blake:* [Showing him the thermometer]. It's dropping!

*Hone:* What's it dropping for?

Before Blake can answer Jan speaks from the door.

*Jan:* One with white paper, one with black paper and one without. Blake, have you got your group organised, please?

Blake, Thor and Hone walk away, as if to leave to go outside, but soon return to the sink and run their thermometers under the water again. Blake speaks loudly in an excited tone.

*Blake:* It's up! It's up! I think.

Thor feels the water. Blake turns the other tap on. Thor begins to turn the taps.

*Thor:* It's cold. It's 20 still. It's cold that's why. [He feels the water.]

Blake turns the other tap. At this stage both Thor and Blake are turning taps. Jan approaches the boys and again outlines the steps they are to undertake for her intended class investigation.

*Jan:* You need to go outside with your thermometers and cover one with black paper, one with white paper and one without. All right?

Hone walks off quickly as Jan comes over to the sink. Blake rips off a paper towel and dries the thermometer.

*Blake:* Yep.

Thor turns and leaves. Blake follows him, drying his thermometer.

### **Resistance and agency in the student-initiated science investigation**

Rather than taking a binary perspective on this classroom episode, as an either/or response, this paper brings together the notions of resistance *and* learner agency. Blake's actions as a learner illustrate a dispositional element of agency—that students can engage in agentic learning, where they enact key competencies, even when diverging from their teachers' planned lessons. Blake demonstrated a disposition to learn by going to the back of the classroom to commence an investigation into the temperature of tap water using his thermometer. He collaborated with his peers to author a learning activity, although, at first glance, the boys appeared to be engaging in an act of resistance.

Through the investigation, Blake drew from and used a range of key competencies. He participated with other boys and used language and symbols as illustrated by his use of classroom science discourse when he spoke of the temperature going up and down and his interpretation of the thermometer numerals to communicate with them. He related to others by discussing his learning with them when he invited Hone to share his discovery that the temperature was dropping. Blake also managed himself by persisting in his investigation and demonstrating sustained attention to his task.

This episode also illustrates how key competencies can be enacted through students' actions as they adopt curriculum-based learner identities. In this episode, the boys demonstrated the disposition to act like scientists when they planned and executed their investigation. Blake and the other boys mobilised both personal (the disposition to risk-take) and social resources (the use of space and social positioning of peers and the teacher) to initiate and sustain their investigation. As noted above, by refusing to be a good student and go outside with his peers, Blake was able to author an agentic scientist identity. Learner agency is therefore demonstrated when students use both personal and social resources to take up active and authoritative identities.

Blake deliberately authored his scientist identity in this classroom episode; explicitly and authoritatively identified himself as a scientist when he claimed, "Look, I'm a scientist. I am taking some temperature." Consistent with a student scientist identity, he used scientific tools to take scientific actions and used science classroom language such as "It's staying in the same place" to describe the level of the mercury. He was not even distracted from his task when Hone poked him in the ribs. As an agentic learner, he persisted with his investigation and drew from his knowledge of classroom science, for example, how to hypothesize and how thermometers work, to generate new knowledge on the link between water temperature and thermometer readings through his investigation. In short, Blake drew from and arguably strengthened his competencies as a science learner.

### A teacher recognising agency in resistance

Jan was surprised and pleased when, in his interview, Blake was able to articulate findings from both her intended lesson on solar energy and the inquiry he co-constructed with his peers (Table 1).

**Table 1: Blake's description of the findings in each of the two investigations**

Solar Energy Investigation	Water Temperature Investigation
It [the temperature on the thermometer] rises faster with black paper.... Just like putting it into hot water.	The thermometer was going up if we put it in hot water.... Um, I was learning about degrees and that. How hot it goes and how cold it goes.

When Jan saw the footage of this classroom episode she recognised the science value in Blake's student initiated investigation. She reflected on what she could have done differently, indicating she could have given guidelines and reasons for the task rather than a set of instructions. Her comments suggest she realised the value of offering space for students to exercise agency.

So when they did that, because there were quite a few of them who were going and putting their thermometers under running water and weren't setting up the practical I had intended them to do, I thought, "Oh, I should have actually planned for this." Planned for them to experiment themselves with the thermometers. Just give them some guidelines for the use of thermometers so that we have still got a class set of thermometers at the end of the period. So just the guidelines about it and reasons why and then just let them do what Blake is actually doing. Because he was very focused on what he was doing.

### Conclusion

Underpinning a focus on life-long learning is the notion that learners need to be flexible and adaptable if they are to address the challenges of our fast-paced, constantly changing society. Competent learners recognise how to use and adapt competencies to apply them in new learning contexts. Agency is not something students can have or possess; it is located in situated contexts where students

enact learner identities. The paper provides one example from a study (Charteris, 2013) that highlights the need to look beyond superficial interpretations of student actions and of key competencies to emphasise that learning and competencies can manifest in and through resistance. The episode highlights a paradox in that what can appear to be off-task behaviour may be very much on-task, agentic learning.

The episode, and others in wider study, highlights the importance of teacher responsiveness to learner agency. When students enact competencies in unexpected and unsanctioned ways, the disposition to risk-take to persist in a self-developed agenda can be overlooked by practitioners. The initiation of learning and adoption of academic identities can pass unrecognised in real time when teachers merely see such actions as student resistance. If competencies are recognised as performative and context dependent, it requires teacher practice that is responsive to student initiatives that support learner agency. By noticing student-initiated academic identities in the classroom, receptive teachers can recognise learner agency and respond to the unanticipated opportunities that occur moment by moment in classrooms. This then has implications for the way in which key competencies can be interpreted and strengthened in classrooms. In particular, it highlights via a counter example of the value of educators recognising and promoting the types of socially driven learning experiences that support students to develop the capacity to act agentially and take risks in their learning.

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