Teachers' Reflection on their Agency for Change (TRAC)

Citation for published version:

Digital Object Identifier (DOI):
10.1080/13664530.2020.1868561

Link:
Link to publication record in Edinburgh Research Explorer

Document Version:
Peer reviewed version

Published In:
Teacher Development

Publisher Rights Statement:
This is an Accepted Manuscript of an article published by Taylor & Francis in Teacher Development on 08 January 2021, available online: http://www.tandfonline.com/doi/full/10.1080/13664530.2020.1868561.

General rights
Copyright for the publications made accessible via the Edinburgh Research Explorer is retained by the author(s) and / or other copyright owners and it is a condition of accessing these publications that users recognise and abide by the legal requirements associated with these rights.

Take down policy
The University of Edinburgh has made every reasonable effort to ensure that Edinburgh Research Explorer content complies with UK legislation. If you believe that the public display of this file breaches copyright please contact openaccess@ed.ac.uk providing details, and we will remove access to the work immediately and investigate your claim.
Teachers’ Reflection on their Agency for Change (TRAC): Tool for teacher development and professional inquiry

Nataša Pantić

School of Education, University of Edinburgh, Edinburgh, UK

Moray House School of Education
Charteris Land, Room 4.15
Holyrood Road
Edinburgh EH8 8AQ
Tel: +44(0)131 651 6626
Email: natasa.pantic@ed.ac.uk

Dr Nataša Pantić is a Senior Lecturer at the University of Edinburgh, School of Education. Her recent research has focused on teachers’ relational agency and collaboration in contexts of educational inclusion and diversity. Her research interests also include educational change and teacher education, as well as links between education and citizenship. She is currently the Director of the Centre for Research on Educational Inclusion and Diversity, where she leads the project ‘Teaching that Matters for Migrant Students (TEAMS) in Scotland, Sweden and Finland’, as well as other projects such as ‘Agents of Change Toolkit (ACT) for schools and teachers’ that support research-informed professional development. She has published extensively in the field’s major international journals, books and other outlets, and regularly engages in collaborative projects with practicioneers and consultancies for international organisations.

ORCID: https://orcid.org/0000-0002-9261-2500
Teachers’ Reflection on their Agency for Change (TRAC): Tool for teacher development and professional inquiry

Claims about teachers’ potential to influence change tend to overlook that educational outcomes arise from complex, situated practices of many actors including teachers. This paper introduces a tool for Teachers’ Reflection on their Agency for Change (TRAC) for empirical analysis of teaching as a collective activity designed to ‘track’ the diverse outcomes of teacher agency, including but not limited to student attainment, while accounting for the relational and institutional contexts. Activity Theory is applied to map purposes and contexts of teacher agency. Uses of TRAC in professional development and inquiry are illustrated with an example of one teacher’s reflection during her collaboration with researchers on a change project aimed at ‘closing the attainment gap’. Inclusive Pedagogy is used as an interpretative lens to discuss agency in relation to its specific purpose and context. The paper offers guidance for future uses of TRAC to consider teachers’ impact on any change agenda.

Keywords: teacher agency, teacher reflection, activity theory, inclusive pedagogy, teacher education.

Introduction

The idea of teachers as agents of change has become popular in literature and policy documents. Research shows that teachers can and do make a difference in students’ learning and schooling experiences (Hattie 2009) but they do not do so alone (Flecha and Soler 2013). Educational outcomes arise from complex interactions between teachers, students and others, within institutional settings that are shaped by political and cultural dynamics (Berliner 2002). Teachers’ practices are highly contextualised and dependent on those of others in the system (Vongalis-Macrow 2007). Yet teaching is often conceptualised as a function of teachers’ beliefs or competences, predominantly focused on classroom instruction, while other aspects of their complex roles are only
sporadically addressed in teacher education (Cochran-Smith and Villegas 2014; Pantić, Wubbels and Mainhard 2011).

The more recent positioning of teachers as ‘agents of change’ and ‘system thinkers’ (Fullan 2006) implies that teachers are expected to understand the broader contexts of educational activity, and work beyond the boundaries of their classrooms, e.g. to remove the different barriers to learning that some of the children in their charge might be facing. Schools are increasingly sites of inter-agency work with other professional services such as health and social work to protect children who are at risk of social exclusion, underachievement or other forms of marginalisation (Edwards 2017; Pantić and Florian 2015). Arguably, good teachers have always been committed to these ways of working, whether or not such roles have been explicitly defined in policy documents (Pantić and Carr 2017). What is new is the emphasis of the need to systematically prepare teachers for such a role, especially in the context of increasingly diverse student populations that challenge a view of teaching as an isolated teacher-classroom activity (Pantić and Florian 2015; Florian and Pantić 2017).

Teacher communities – variously defined as professional learning communities or communities of practice in which teachers share common purposes and support each other – have been recognised as a promising concept that can facilitate fundamental shifts in how teachers approach their work as a collaborative, rather than individualistic activity (Vescio, Ross and Adams 2008). However, empirical analyses of such communities have been scant and limited to either particular case studies with limited generalisability, or ‘cause and effect’ analysis of larger numbers of cases at the expense of contextual understanding (e.g. Louis and Marks 1998). Despite providing valid forms of evidence, these approaches have been insufficient for understanding how educational outcomes unfold from complex, context-embedded social practices in which teachers
and other actors negotiate the meaning and purposes of policies and practices.
Moreover, existing studies have been criticised for ‘trivialising teaching practice’ by adopting a simplistic assumption that the sole purpose of teachers’ professional communities is to have impact on students’ attainment (Riveros, Newton and Burgess 2012). In summary, it has been difficult to capture systematically the diverse purposes and contexts of teachers’ collaboration.

Studies of ‘relational agency’ – reaching out to others in order to ‘take forward what matters to them’ (Edwards 2017) – show that teachers’ engagement with others within and beyond school community is driven by a range of commitments, e.g. to student wellbeing and participation as well as learning (Edwards and D'ArCY 2004; Pantić 2017). Importantly, teachers may exercise agency to adopt, adapt or challenge existing policies and practices depending on their own understanding of what is desired and possible in a given context (Pantić 2017; Priestley, Edwards, Priestley and Miller 2012). This is why we need new conceptual and methodological tools for examining the impact of teacher agency towards achieving the diverse, and more authentic, purposes of collaborative working, while taking account of broader policy and social contexts in which individual practices are embedded.

Factors that influence teacher agency have been found at micro, meso and macro levels (Priestley, Biesta and Robinson 2015). For example, teachers may inadvertently contribute to the reproduction, as well as transformation of educational inequalities because of the assumptions embedded in their (macro) institutional contexts or their own unexamined beliefs (micro level). At the meso level of school communities, teachers’ practices are shaped by the relational and institutional structures that influence what they see as possible within their practice. Ainscow (2005, 2015) argues that school
communities are the more powerful levers of change since they have a real effect on peoples' lives and mediate other influences.

This paper introduces the log for Teachers’ Reflection on their Agency for Change (TRAC) designed for studying teaching as a situated, relational practice, by placing school communities rather than individuals at the centre of analysis. As a research tool, TRAC enables rigorous analysis of the impact of teacher agency within school cultures relative to the different policy and social structures. TRAC also functions as a practical tool that facilitates teachers’ systematic reflection on the ways in which the outcomes of their collective activity are shaped by the broader institutional set-up. It is particularly suitable for practitioners and researchers working together to articulate the need for change and ‘track’ the impact of collective teaching practices on specific change purposes. The paper illustrates and discusses such uses with the data from the reflective log filled out by one teacher in Scotland who leads a change project for ‘closing the attainment gap’ in her school, analysed within a conceptual framework that applies elements of activity theory (Engeström 1987, 2001) to teacher agency for inclusion (Pantić and Florian 2015).

The conceptual framework

The conceptual framework was initially developed within a project conducted for the Council of Europe¹, combining activity theory with that of teacher agency for inclusive pedagogy (Hollenweger, Pantić and Florian 2015).

¹ The project promoted a coherent vision of inclusive practice across communities of schools, teacher educators and policy makers in seven countries in South East Europe. The framework
Activity theory

Activity theory has become an influential conceptual framework for the analysis of transformational processes in education (Edwards and Daniels 2004). Activity theory originates from Vygotsky’s (1978) theorisation of learning as a social activity. Individuals and groups embedded in a social system use external artefacts to define their situation and take control of their joint actions to transform the context of their daily work (Vygotsky 1978). The unit of analysis here becomes joint activity rather than an individual activity. A particular version of activity theory developed by Engeström and his colleagues (1987, 2001) has become a popular framework (represented in Figure 1 and described below) for analysis of organisational change in education and other work settings (Avis 2009; Edwards and Daniels 2004). Bourke, Mentis and O’Neill (2013) argued that activity theory enables a more nuanced understanding of the complex ways in which teachers engage with official curriculum, pedagogy or assessment, than do theories that position teachers as simply implementing or being resistant to change.

On the other hand, critics point to the limited capacity of Engeström’s version of activity theory to account for the wider social and political structures that enfold activity systems in the first place (Peim 2009), and to the theory’s ambivalence about the role of actors’ agency. For example, Avis (2009) argued that change within organisations might simultaneously serve an interest for improving the efficiency of institutional practices towards externally set agendas, rather than the more democratic

was designed to map university, NGO and school-based teacher development programmes in the region (Hollenweger, Pantić and Florian 2015).
process of school improvement that is truly valued by professionals, students or their families.

TRAC is designed to enable empirical accounts that can help us address this ambivalence over conceptualizations of agentic action (Edwards and Daniels 2004). Departing from a position that social practices may change in incremental steps, it provides a resource for research designs that aim to capture the impact of teacher agency within the relational cultures of their schools as well as the broader macro-social structures that shape individual and collective practice (Martin and Peim 2009). Culture and community are not just factors that discriminate between settings, they are also a medium through which ideas are developed as actors exercise their agency and influence each other (Daniels 2004). School communities can therefore be expected to both shape and be shaped by teachers’ collective agency.

Teacher agency

TRAC is underpinned by a socio-cultural perspective on professional agency as determined by teachers’ commitment to the goals that are important to them, as well as by the social and institutional setting of their practice (Eteläpelto, Vähäsantanen, Hökkä and Paloniemi 2013). The aim is to gauge the development of teachers’ reflexivity as an essential aspect of their agency (Pantić 2015a, 2017). Archer (2000) emphasises the importance of reflexivity as a distinctly human capacity to monitor and evaluate actions and social contexts, for envisaging alternatives and working with others to bring about transformation. Within this perspective, power to shape collective practice relies on actors' capacity to articulate common aims and negotiate the meaning of their practices, in order for individuals to play their part in creating and sustaining relevant cultures and structures (Archer 2000). For Archer (2000) agency is always collective, while individuals are actors who shape the outcomes of activity, not in a way any particular
actor wants but as a result of interactions. Their efficacy is entirely dependent on what sense agents make of their contexts. This is why TRAC is designed to capture teachers’ own perceptions of their relational and institutional contexts in relation to specific change purposes that are important to them.

The concept of teacher agency enables us to examine the extent to which teachers’ sense of professional purpose reflect the policy discourses in which they are embedded as well as their own knowledge of how to best support their students, which might be aligned or at some level of tension with each other. Biesta, Priestley and Robinson (2015) found that teachers’ beliefs about their agency reflect narrow views of educational purposes in current policy discourses of performativity and improved attainment. Other analyses of teachers’ discourses suggest that the way teachers talk about their day-to-day work does not always match that of the policy. For example, Boag-Munroe (2004) contrasted the policy language of ‘achievement’, ‘progress’ and ‘quality,’ to that of teachers who tend to highlight the importance of caring, supporting, and ‘being there’ for students, as central to their work.

TRAC provides a new resource for empirical analysis of teachers’ authentic, situated practice by simultaneously collecting data about their a) sense of professional purpose (e.g. to what extent they see themselves as role-implementers or agents of change); b) relational practices (e.g. ways of working with others to remove barriers to learning); and c) reflections on contexts that shape the outcomes of their practice (e.g. to what extent they critically examine the impact of institutional contexts of their work).

Activity theory and teacher agency for inclusive pedagogy
The Council of Europe project used Engeström’s general activity model\(^2\) (Figure 1) as a starting point for mapping the components of an activity system that can be analysed through the lens of teacher agency for inclusive pedagogy (Hollenweger, Pantić and Florian 2015).

![Figure 1. about here](image)

\(\text{Subject}\) refers to the individual or sub-group whose agency is chosen as the point of view in the analysis, and whose actions are directed at the \(\text{object}\) (Bourke, Mentis and O’Neill 2013).

\(\text{Tools and Artefacts}\) are physical and cognitive tools used to carry out the activity or to transform object to outcome (e.g. inclusive pedagogy).

\(\text{Object}\) refers to the focus of the activity; it defines what the activity is directed towards (e.g. other people, or a problem such as risks of exclusion, underachievement or marginalisation).

\(\text{Context}\) refers to the social setting or physical environment in which the activity is carried out (e.g. social norms or rules, school climate, resources or support systems).

\(\text{Outcome}\) refers to all wanted and unwanted impact created as a result of carrying out an activity (e.g. participation and learning of all students, or labelling of some).

\(^2\) A simplified version of the Activity Model was sufficient for the project purposes. The original model developed by Engeström and his colleagues (1987, 2001) is more complex.
The concept of expansive learning – production of culturally new patterns of activity (Engeström 2001, 2005) – has been central to both the analytic potential of activity theory and in the development of practice. The paper illustrates how activity theory can be applied to analyse and develop a process of reconceptualization of the object using the artefact of inclusive pedagogy where working with others is key for removing barriers to learning (Florian and Black-Hawkins 2011).

The Case Study

Subject in this example is an English teacher (whom I will call Chloe) in a secondary school on the outskirts of Edinburgh. The school serves a population of about 600 students from a variety of socio-economic, cultural and linguistic backgrounds. Chloe leads a school project aimed at addressing the inequity in educational outcomes between some of the most deprived students and their better off peers. The project was initiated in response to the Scottish government strategy to address the poverty-related attainment gap. The activity is understood and analysed from Chloe’s perspective. She approached researchers at the University of Edinburgh via her former tutor in the School of Education where she had trained as a teacher. In a collaborative project3, the researchers provided tools (including TRAC) and artefacts (Inclusive Pedagogy) to facilitate the change process. The project ran over one school year in which Chloe aimed to establish a community of practice to promote inclusive pedagogy.

Tool is a reflective log which had been developed in the previous year by an advisory committee of practitioners and researchers who worked together to combine

---

3 ESRC Impact Acceleration Award, Making Visible Teacher Agency for Inclusion (Pantić and Linklater 2018) https://www.team4change.education.ed.ac.uk/
research-generated insights with users’ perspectives about what ‘really matters’ in their professional contexts (Pantić 2015b)⁴. The log invites teachers to reflect on a particular situation in which they sought support from colleagues in order to make a difference in their school. It was developed over two years and tested with 24 teachers in the UK who filled out the log and send comments about the log itself, which were used to make adjustments to improve the clarity of instruction and user-friendliness resulting in a web-based version⁵ that has three sections:

1) WHAT kind of a difference teachers tried to make?
2) WHO were the people they sought to involve and how?
3) WHY they did or did not manage to make a difference?

The aim is to enable teachers to report their experience in their own terms – in other words, how they see the objects, contexts and outcomes of their agency for change. Chloe’s log provided a snapshot of her reflection in early stages of leading the ‘change project’ in her school. Specifically, the present paper reports on two initial steps in the change project: setting out the desired change of object, and trying to gage the diverse perspectives of different actors in her school on what the wanted outcomes might be. Chloe’s case is selected on the basis of its suitability for exemplifying the theoretical reasoning, not its typicality or representativeness (Macpherson et al. 2000). In particular, excerpts from her log were selected on the basis of their potential to exemplify the two types of ‘expansive reflection’ outlined below.

⁴ The original version of the log and collaborative methodology are presented elsewhere (Pantić 2015b).

⁵ The web-based log is available at: reflective-teacher.net
*Artefact*, the inclusive pedagogical approach (Florian and Black-Hawkins 2011) is used to illustrate how teachers exercise agency to (re-)conceptualise their collective activity. Inclusive pedagogy is distinctive in that it attends to individual differences between learners while actively avoiding the marginalisation of some learners and/or groups, for example, ethnic minority students or those who may be disadvantaged by poverty. Inclusive practice is seen here as learning how to respect and respond to human differences in ways that include, rather than exclude, learners from what is ordinarily available in the daily routines of schooling, rather than doing something ‘additional’ or ‘different’ for some (Florian 2009; Florian and Black-Hawkins 2011).

While in the English speaking world ‘pedagogy’ is often understood as a practice related exclusively to classrooms, here inclusive pedagogy is situated within the broader theory of teacher agency with the aim of expanding the remit of teacher reflection for developing their *relational agency* – working inclusively and purposefully with various others, including school colleagues, as they seek to remove the barriers that some learners may experience (Edwards 2007, Pantić and Florian 2015). Teacher agency for inclusive pedagogy provided an interpretative lens for analysing Chloe's making sense of the need for transformation in all elements of the activity.

*Object* refers to the problem or space at which the activity is directed and which is moulded and transformed into ‘outcomes’ (Bourke, Mentis and O’Neill 2013), in this case aimed at closing the gap in attainment. It also refers to a normative account of the nature and purpose of change in terms of its social or moral value. Activity systems go through transformations as individuals begin to question established norms, which can lead to a deliberative collective change effort (Engeström 2001). Agentic action relies on human potential to create intellectual, emotional and moral judgments as a starting point in (re-)thinking the *object* of an activity (Engeström 2005; Yamazumi 2007). An
‘expansive transformation’ is accomplished when the object of the activity is reconceptualised to embrace a radically wider horizon of possibilities than in the previous mode of an activity (Engeström 2005; Virkkunen 2006).

In light of inclusive pedagogy, this might involve a shift in thinking away from commonly accepted ways of providing for everyone by differentiating for some (Black-Hawkins and Florian 2012). The act of extending to everybody what is ordinarily available, as opposed to doing something ‘additional’ or ‘different’ for some is a complex pedagogical endeavour that places the focus of activity on 'everybody' rather than 'some' to engage with individual differences between learners without relying predominately on individualised approaches for responding to such differences (Black-Hawkins and Florian 2012). Teacher agency here can be understood as the breaking away from a given frame of action (e.g. labelling students on the grounds of their ‘additional needs’) and taking the initiative to transform it along the principles of inclusive pedagogy, i.e. accounting for everybody’s learning while avoiding marginalisation of some, and seeking creative ways of working with others (Florian and Black-Hawkins 2011).

Contexts. Researchers point to the advantages in using activity theory as a systematic method for treating contextual data, and a starting point for identifying the critical contextual elements that affect the object and outcomes of an activity (Yamagata-Lynch 2007). It is important here to distinguish between the institutional and relational contexts of teachers' work. While teachers are often positioned as implementers, rather than co-designers of various institutional and national policies and reforms, the scope of their agency can be significant in shaping the relationships in their school communities. Fullan (2007) suggests that bringing about change in schools is essentially a social process. Ainscow (2015) argues that social interactions in which
school staff negotiate the meaning of their practices within school communities are key for the development of inclusive practice. However, whilst quantitative change may occur locally this happens on the terrain shaped by those who have power to determine the change agenda (Avis 2009). Deeply held beliefs and tensions around conflicting agendas may prevent the experimentation necessary for developing new ways of working. For example, a tension between a ‘standards agenda’ and an ‘inclusion agenda’ has long been recognised (Dyson and Gallannaugh 2007; Kugelmass 2001). In many contexts inclusion is seen to challenge existing institutional structures and to require a willingness to take risks to improve all students’ learning, but teachers have been able to work inclusively to support all learners (Florian, Black-Hawkins and Rouse 2017) even when they feel constrained by the national strategies of performance and control mechanisms (Dyson and Gallannaugh 2007).

Outcomes. Chloe’s log illustrates the kind of data that can be collected with TRAC, including what she sees as the wanted and unwanted outcomes of teachers’ collective practice. The concepts of teacher agency and inclusive pedagogy provided a framework for interpreting Chloe's reflection in terms of its alignment to the external agendas, and to the inclusive pedagogical approach which is concerned with educational attainment as well as other outcomes (Florian and Black-Hawkins 2011). This paper does not report the actual outcomes of collective practice in Chloe’s school since the change process she led outlasted the project itself. Rather, it discusses how TRAC could be used to gather evidence about the impact of context-embedded teacher agency in future studies.

Expansive teacher reflection

Activity theory and its concept of expansive learning also apply to the development of practice, e.g. by facilitating what I call 'expansive reflection' in teacher education.
Traditionally teachers (*Subject*) have been prepared to ‘apply’ knowledge and strategies (*Tools and Artefacts*) in their classroom practices with students (*Objects*), while the broader institutional set-up and desired outcomes of educational activity have been defined by others in the system (policy-makers; administrators; curriculum designers; inspectors, etc.). In activity theory terms, agency in transforming work activities is ascribed to management and specialists, while grass-roots level practitioners are often expected to focus on their tasks within the given frame of action, rather than involve themselves in changing the structure of the activity system as a whole (Virkkunen 2006).

As a tool for professional development TRAC is designed to support the preparation of teachers as ‘system thinkers’ who can contribute to changing the conditions of their practice in collaboration with others within and beyond their school communities (Fullan 2006). Learning how to draw on the resources of others to support ones’ actions and being able to offer oneself as a resource for others are also essential aspects of teacher agency (Edwards and D'Arcy 2004; Pantić 2015a; Pantić and Florian 2015). TRAC supports teachers' and student teachers' expansive learning by facilitating a systematic reflection on all components of the activity system (Engeström 1987; 2001). In particular, the aim is to stimulate and capture the expansion of teacher reflection to the *contexts and outcomes* of their collective activity (Figure 2.).

Figure 2. about here

Below such expansive teacher reflection is illustrated using the log data provided by Chloe. Her log captures two major ‘expansions’ in her reflection: one from
the current to a qualitatively new form of the activity system (along the lines of the inclusive pedagogical approach); and the other from individual to working with others (researchers and school colleagues) on the analysis of the whole-school activity system (Virkkunen 2006).

**Expansion towards a qualitatively new form of the activity system**: extending to all what is ordinarily available, while avoiding labelling of some

In her log Chloe reflected on the initiation of a participatory process to identify the direction of change for closing the attainment gap. She described the initial meeting in which she engaged with a group of colleagues to gauge what interested them in the project and how it fitted in with their professional learning and development:

> I prepared questions about the most problematised areas of their teaching at present, their strengths, what they hoped to get out of the project (for themselves and the school) as well as what the students identified as being in our ‘closing the gap’ group may currently find most challenging and the changes they most want.

> ...exploring concepts and practice was helpful in starting to tune in to the different interests, concerns, dynamics and understandings within the group. This will influence how I plan the more structured input beginning to explore key concepts and ideas from inclusive practice... and how these may influence our practice.

> Chloe described an important step in a change process – collecting data on problematic aspects of the activity and involving actors in defining the problem and identifying need for change (Virkkunen 2006). She sought to facilitate a multi-voiced, exploratory discussion, prepared corresponding tasks and input, such as analytical concepts of teacher agency and inclusive pedagogy, facilitated by the researchers. The concept formation proceeds as interaction between the systemic and everyday concepts created on the basis of individuals’ local observations and experiences (Engeström
The actors involved in local activities develop, on the basis of their experiences, their own local concepts as tools for thinking and communicating about their joint activity:

I was also interested to hear people drawing from different parts of their experiences – their own professional teaching experiences, the insights brought by parenting, news reporting around education (in particular PISA and countries who ‘do well’ in PISA and why this might be) and their own theories and values around education. There was a thirst to know more about what the research tells us about areas that were raised but few directly raised research they had already engaged with.

This resonates with Virkkunen’s (2006) suggestion that change processes require methods that allow practitioners not only to apply a new concept in transforming their activity, but also to analyse the need for change in order to address challenges.

With regard to teacher agency, Chloe's reflection offers an example of how teachers simultaneously act as implementers of existing policy agendas, and agents of change who respond critically to those agendas. Her activity directed at the implementation of a national strategy for closing the attainment gap shapes, and is shaped by the local actors’ understanding of the task at hand:

Most responses were very focused on how to get marginalised learners up to speed with the expectations of academia and to get them to learn more and be ‘enhanced’…Our energies are being invested heavily in how to coach kids over the finishing line of exams rather than taking a more holistic view of their education and having the confidence that in offering them a good and worthwhile experience they will build the skills, knowledge and confidence they need to perform in exams as well as life.

To change exam results while placing a lot of individual pressure (and, implicitly blame) on small groups of students who are perceived to be the ones who will drag our
attainment statistics below the desired levels for particular SIMD groups, to my mind reproduces the marginalisation which this particular policy should have the power to disrupt.

Engagement with the artefact of inclusive pedagogy helped Chloe articulate a major contradiction involved in the efforts aimed at closing the attainment gap. Her critique of the effect of policy interventions on school practices and culture resonates with the theoretical concepts of teacher agency and inclusive pedagogy:

I want us to be critical, assertive and inclusive in the way that we approach the messages and ideas being set out by the Scottish Government and Education Scotland and, in particular, body swerve ‘interventions’ that may bring about improvements in attainment data but do so through labelling, tracking, ‘assertively mentoring’ and cajoling individual students or groups of students. We have as good an opportunity as ever to really investigate what a more socially just, inclusive pedagogy would be in our school and to take time to listen deeply and well to the voices in our school community (dissenting and praising, tentative and confident, screaming and in control) to make changes that are meaningful in students’ lives as well as in their exam results.

She clearly demonstrates her agency as an ability to respond critically to problematic situations (Biesta and Tedder 2007) and rejects reliance on individualised approaches for responding to differences between learners by doing something ‘additional’ or ‘different’ for some (Black-Hawkins and Florian 2012).

---

6 The Scottish Index of Multiple Deprivation (SIMD) determines 10 deciles based on pupils’ home addresses classified by the level of deprivation released by the Scottish Government on 18.12.12.
Vygotskians see ‘scientific’, or systematic, concepts as powerful tools that allow people to think beyond the limits of their immediate everyday experiences and to work collaboratively with others to build new knowledge (Daniels 2004). Virkkunen (2006) suggests that practitioners’ first step is to distance themselves temporarily from their work and undertake the analysis of the prevailing concept of their collective activity. This enables them to identify contradictions in the prevalent system, and then design and implement a new concept for their activity. As a secondary stimulus researchers provide a general model of an activity system that can help practitioners characterize essential features of the current concept of their activity, identify inner contradictions and trigger a debate concerning the kind of explicit concepts that could be applied to guide its future development (Engeström 1987). This way practitioners can create a shared artefact for themselves that helps them to move from their current way of thinking and acting, and begin to transform the activity system collaboratively through experimenting with new practices (Virkkunen 2006).

A reconceptualisation of the object of activity along the inclusive pedagogical principles implies the act of extending to everybody what is ordinarily available by building an inclusive school community in which all learners have a say in deciding the direction of change. A shift in (re-)thinking the object of activity towards closing the attainment gap while avoiding marginalisation, and moving away from commonly accepted ways of providing for everyone by differentiating for some, could be seen as a process of expansive learning in which culturally new patterns of activity are produced (Engeström 2001; 2005).

An expansion towards a qualitatively new form of the activity system implies that change in any of the elements of the activity system leads to incompatibility and contradiction between that element and others in the system, which can be overcome by
making corresponding changes in the other elements. We could speak of a transformation of the concept of an activity when the object has been reconceptualized and all the other elements of the system have changed correspondingly (Virkkunen 2006). Through the lens of inclusive pedagogy, such transformation of contexts involves ways of working with others that promote the learning and participation of all (Black-Hawkins and Florian 2012).

**Expansion from individual to collective activity**: working with others to build inclusive schools communities and remove barriers to learning

Teachers in Scotland are encouraged to work with others within and beyond their classrooms as part of the agenda for addressing inequalities in student outcomes in Scotland. For example, the 'Getting it Right for Every Child' policy (Scottish Government 2014) calls for teachers to work with other services and communities in order to support the learning and wellbeing of all children. At the same time the Scottish policy environment is not immune to the tension between ‘standards’ and ‘inclusion’ agendas (Florian, Black-Hawkins and Rouse 2016). In her log Chloe observes how these agendas and institutional structures shape the school culture that presents both opportunities and constraints for change:

> Everyone I know, from school management to class teachers to support staff talk about our school as a community and are motivated by investing in people to be their best and do their best. They definitely care about our students. However, I feel that the speed of educational ‘reform’ and the pressure placed by external judgements being based on attainment data mean that when we have development time we’re often talking and thinking too fast to actually stop ourselves from getting caught up in simple, data driven, exam-based metrics of ‘attainment’ and ‘success’.
The most stark issue for me as a teacher is working within an institution which maintains a fundamental divide / binary between students and teachers in our history, our spaces… Our structures are all set up with a default assumption of a smaller number of employed, professional, decision making adults (generally at the front of things) and a large number of young people (generally organised in groups according to date of birth and then further sorted, timetabled, uniformed and measured by us)...It highlights to me that we have a long way to go in re-imagining our schools so they are genuinely democratic, inclusive, socially just communities in which everyone thrives.

The enactment of change happens in a concrete relational environment in which policies get interpreted, adapted or rejected as professionals exercise their agency (Robinson 2012). Coburn (2001) suggests that teachers co-construct understandings of policy messages, make decisions about which messages to pursue, and negotiate the details of implementation in conversations with their colleagues. Chloe shared some ideas about what the more inclusive 'alternatives' could look like in her school:

...inclusive practices that would mean our school’s response to ‘closing the poverty related attainment gap’ acts to open up learning for all and empower students to be agents of change in their own lives and in the lives of others... could include:

Creating new ways (and better ways) to engage ALL students in sharing their learning experience and being part of our wider school community.

Changing the way that learners are organised within our school, at all levels from class experience to whole school:

• At class level: more co-agency in classrooms,…engaging more with the lived experience and home cultures of our learners,…giving students more choice and responsibility in deciding how learning is organised...
• At a departmental level:... create more opportunities for the learning described above...greater partnership working across departments, a clear focus on HWB [Health and Wellbeing]...

• At school level:...more opportunities for staff (and possibly students) to collaborate, greater willingness to dissent when we feel the ‘top down’ messages need to be met with dissent,....finding ways to better engage with families, carers and communities who are currently marginalised within our decision making and even awareness.

Engeström (1987) suggests that the object of activity appears to the subject first in the form of discrete tasks, problems and actions which practitioners can analyze and seek to transform and expand to a new activity structure within their practice. Chloe’s reflection above is a good example of practitioners' knowledge that resonates with equivalent theoretical propositions about teacher agency and inclusive pedagogy and exemplifies an expansion in thinking about teaching away from an individual towards a collective activity that crosses the school boundaries. There is a clear acceptance of differences among students and emphasis of the principles of 'everybody' and 'co-agency' (Hart et al. 2004), as well as a recognition of the need to work with others.

According to Vygotsky (1986) the cardinal difference between spontaneous or everyday concepts and theoretical or 'scientific' concepts is the ‘absence of a system’ (emphasis in the original, p. 205). The lack of system in spontaneous concepts means that contradictions can go unnoticed because the systemic relationships are not recognized. This is often the case when people are discussing the activities in which they are involved. Object-oriented actions are characterised by ambiguity, interpretation, and sense-making as well as potential for change (Engeström 2001; Virkkunen 2006). Relational agency involves attuning to others’ purposes and different
perspectives (Edwards 2007). Chloe’s log illustrates a difference in her understanding of how ‘the attainment gap’ is to be addressed and that of her head teacher:

Numerous conversations I’ve had with my head teacher about this has involved a repeated discussion of the number of tariff points particular students are going to need to pick up to statistically ‘close the gap’. I am concerned that this preoccupation is being communicated to students as a message that being part of our school community is about getting the right grades for us (as well as for your future life).

Chloe’s log highlights the contradictions and tensions that characterise expansion in thinking from individual towards collective activity. The different views of the task at hand by different actors in the system resonate with Virkkunen’s suggestion that individuals taking part in activity may have very different cognitions of its basic logic (2006). It also corroborates Coburn’s (2001; 2005) findings about teachers’ and head teachers’ influence on the enactment of policy ideas, by participating in the social process of interpretation and adaptation that shape their collective sense-making of policy agendas. Chloe’s log highlights the critical importance of teachers’ ability to articulate, acknowledge and deal flexibly with such tensions and contradictions for building inclusive school communities.

Characterising school cultures as inclusive or otherwise is not a straightforward matter (Nind et al. 2004). Multiple understandings of what it means for a school to be inclusive may to a greater or lesser extent reflect policy agendas of the day (Boag-Munroe 2004). Identifying tensions and contradictions in the activity system can be a driving force for change through building shared meanings and planning a sequence of collective action (Engeström 2005; Virkkunen 2006). A change in this context can come from developing the capacities of teachers and others within schools to reveal the deeply entrenched deficit views of ‘difference’ which define some students as lacking
something (Ainscow 2015) and work together to mitigate the external causes of educational inequality or structural barriers to inclusion. TRAC can capture the diverse understandings of different actors, while the activity model can facilitate processes of negotiation of the desired change, e.g. by directing attention to points of intervention that might not otherwise be considered (Daniels 2004).

Outcomes - Tracking the impact on change

The basic dilemma in interventions aiming at a transformation of the concept of an activity is that on the one hand, such transformations call for questioning of the current wisdom and practice, and apply knowledge and ideas that may have not been created within the local work community (Virkkunen 2006). On the other hand, if they are to be successful, such interventions have to be based on the local actors’ understanding of the practices that are being questioned. In other words, the systemic concepts serve to organize the local concepts, but have to be connected to the practitioners’ experiences and observations, and enriched and modified through them.

Chloe’s log documents early stages of a process in which school staff set out to articulate the kinds of evidence that are important to them as professionals and to their students, but which are not always captured by the external measures of success in school or student performance. Chloe shared examples of wanted outcomes that reflect a wider range of educational purposes alongside raising the attainment level, such as:

- 'More students feeling happy, safe and engaged in our school community more of the time
- Students’ experience of success and engagement in the wider life of the school such that they leave knowing that they can learn…
• We need to create more time and space to build a confident re-articulation of these ideas so that success means what we feel it means, in a broader sense and attainment is about more than a score

Chloe’s suggestions resonate with previous findings that teachers’ sense of purpose involves diverse outcomes such as student learning experiences, wellbeing and sense of belonging to a school community (Biesta, Priestley and Robinson 2015; Pantić 2015b; 2017).

She also reflects on the unwanted outcomes of the effort to address the inequalities:

However, I feel that our attainment data is increasingly dominating how we perceive ourselves as a school and in particular what we choose to do to develop ourselves as a school... We are also responding to the ‘attainment challenge’ in a way which is labelling students – quite literally, we have a group of students who are known to staff and themselves as ‘the closing the gap group’ and there are plans to potentially create such a group in every year from S1. These students are being offered a range of supports and interventions, and a lot of added attention is being given to them. This is in line with what Education Scotland seem to be sharing as ‘best practice’ which is kind of summed up in ‘identify where the gaps are in your school and then target resources there’. This is resulting in intensified labelling and predicting.

Identification of wanted and unwanted outcomes is a useful step in transitioning to a new form of activity, whether it is part of an external change agenda that schools and teachers are seeking to ‘implement’, or a practitioner-led and identified need for change, or a combination of the two, as in this case.

Chloe also emphasised the need to ‘track’ what really matters:

We need discussion and thinking tools which will keep us on track (once we’ve chosen our direction of travel). The kinds of change that we’re talking about is complex and the
range of influences on our learning community are many…It emphasised the need to bring a focus on practical action and design measures for change.

Ainscow (2015) suggests that the most powerful levers of change are clarity of vision and the forms of evidence used to measure performance. Measures of change can include administrative data (such as pupil attainment) but also a range of other outcomes that are important to school staff or identified in collaboration with researchers, such as indicators of participation and school inclusiveness aligned with the principles of inclusive pedagogy (Black-Hawkins 2010). Chloe’s school continues to collaborate with researchers to capture the process of inclusive community building and ‘track’ change in their collective practices.

This kind of cross-feeding between research and professional development in particular sites is a hallmark of collaborative research methodology designed to maximize both research rigour and potential for impact (Pantić 2015b). TRAC represents a resource for such collaborative working as a new conceptual and methodological tool for tracking teachers’ context-embedded reflection, while generating feedback that can facilitate professional dialogue and transition to a qualitatively new form of collective activity.

Uses in teachers’ professional inquiry and development

This paper introduced a tool for Teachers’ Reflection on their Agency for Change (TRAC), using an example of a change project led by one teacher in her school. Below, I offer some suggestions for how TRAC can be used in research to capture different change outcomes that arise from collective action, and in all stages of teacher professional development.
In research and professional inquiry TRAC log facilitates data collection and analysis to take account of the diverse purposes of teaching as a relational, situated activity. As a research tool TRAC enables novel analysis of the complex practice of teaching by placing the school community rather than an individual in the center of analysis, and accounting for a range of contextual influences, such as policy and education system. The latest version of the log (see Appendix) allows collection of social network data that can be analyzed moving between quantitative and qualitative domains to examine the patterns of teachers’ interactions in relation to particular purposes and content that flows through those interactions. Studies could explore how teachers work with others within and beyond schools to enact (or respond to) particular changes, which is significant for understanding innovation and impact mechanisms.

TRAC can be used in combination with other research tools to capture how particular outcomes of interest arise from the complex relational and intentional practices. For example, we use TRAC together with tools such as Framework for Participation (Black-Hawkins 2010) to explore the actual impact on inclusive school practices. Researchers in other areas could use it to explore the impact on other kinds of change processes such as education for sustainability or new technologies, e.g. by specifying a different question in the WHAT section of the log (see Appendix).

Other studies (see reflective-teacher.net) collect and compare data across different schools and policy contexts to examine teachers’ impact on given outcomes relative to the affordances of their activity systems. Longitudinal studies could map a target activity before and after an intervention, e.g. to examine what the impact really was, and understand how school community is built and sustained through the micro-level interactions between staff as they build their support networks and shared purposes and practices. This kind of evidence is essential for understanding teachers’
relational agency and substantiating claims about their capacity be agents of change in their school communities, and ultimately for their students.

In professional learning and development TRAC can facilitate teachers’ expansive reflection on the outcomes and contexts of activity in the process of articulating or reconceptualising the object of their collective activity. It can facilitate reflection around a goal that a teacher or a group of teachers set to achieve, or in whole-school approaches (see e.g. teacher-act.net), to negotiate the meaning of practices, ways of capturing their impact, and identifying community members with particular knowledge, resources or expertise.

Collaboration with researchers can help school staff articulate the direction of change and 'new' ways of working together, and working with others, to examine the impact of change. For example, feedback from particular research sites can facilitate practitioners’ deliberations to change their discourses (Daniels 2004). Teachers’ acting as agents of change is not likely to be a matter of simply adopting a new concept or strategy in their practice – they need to understand the whole present activity system that shapes their collective practice in order to identify the need for change and their potential contribution. Research-based feedback can help teachers have the bigger picture in mind, in similar ways that managers, policy makers or researchers do.

In initial teacher education TRAC can be used to stimulate wider and deeper student teacher reflection on concrete contexts (e.g. during placement in schools, or discussions of scenarios) as a way of preparing them for the uncertainty of their future workplaces that will be sources of opportunities as well as barriers to acting as agents of change. Scenarios may comprise TRAC data on problematic aspects of the activity, or accounts of difficult situations in real contexts to promote students’ expensive reflection and create opportunities to consider outcomes and contexts of collective practice.
References


(Eds.) The SAGE Handbook of Research on Teacher Education. London: Sage publications.


Florian, L. and N. Pantić. 2017. Teacher Education for the Changing Demographics of Schooling: Policy, Practice and Research. In L. Florian and N. Pantić (Eds.) Teacher Education for the Changing Demographics of Schooling (pp 1-5), Springer International.


Figure 1. General Model of Activity Systems simplified\(^7\) for the Council of Europe project.

Figure 2. Expanding the remit of teacher reflection to the outcomes and contexts of activity.
Appendix

Web-based log for Teacher Reflection on their Agency for Change (TRAC) [www.reflective-teacher.net]