

Generating Data, Generating Knowledge: Professional Identity And The Strathclyde Literacy Clinic

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<u>Abstract</u>

This chapter describes how student teachers working in the Strathclyde Literacy Clinic "translate an experience of the landscape, both its practices and boundaries, into a meaningful moment of service (Wenger-Treyner et al 2015, p. 25). The Literacy Clinic is a collaborative learning project for student teachers undertaking the four-year BA in Education and Teaching at Strathclyde University. The project is designed to build student teachers' fluency in real-time teaching responses in ways that provide a strong emotional and social dimension to their learning. They do not follow an externally-derived programme of work, but use an innovative assessment tool to collect data about the child's cultural and social capital, identity as a reader, writer and learner, and cognitive knowledge and skills. Each team uses this to make decisions about the learning mix the child needs. The chapter details how the experience shapes their values, identity, understanding and practices as literacy teachers.

Introduction

Assessment and intervention in literacy are complex matters, particularly so when young people experience difficulty in becoming literate. To provide a sustainable and effective literacy learning mix teachers must skillfully negotiate and balance knowledge paradigms that reflect different perspectives. An informed decision requires professionals to attend to the evidence of the literacy learners in front of them and to external research evidence, policy directives and theoretical models. This means negotiating a complex landscape in which literacy teaching content is

more than a set of autonomous skills (Luke et al., 2010; Smith, 2010), balancing cognitive data on learner skills and understanding of how literacy 'works' (e.g. Fountas & Pinnell, 2010) with socio-cultural data on learners' wider networks, understandings and experiences of the world, and the purposes and practices of literacy (e.g. Moll & Cammarota, 2010;. Kamler & Comber, 2005), as well as data about how learners are socially and emotionally positioned by themselves and others as literate beings and literacy learners (e.g. Moss, 2007; 2011).

Using data from such different knowledge communities to make balanced and appropriate judgments about how to intervene in any particular circumstance is not an exact science. The absence of a single, unequivocal way forward has the potential to promote professional and political anxiety but is also integral to professional learning and knowledge. Social theorists Wenger-Trayner et al. (2015) envisage professional knowledge as a landscape of practices that inform, influence and rub against each other creating tensions and synergies. Professionals develop competence and knowledgeability by aligning and realigning themselves to the practices of their various core communities, negotiating their boundaries, to make sense in a particular implementation context. Professional knowledge develops as individuals understand the knowledge-communities that underpin their practice, re-defining both the wider landscape of professional practice and their own relationship to it. Through this, individuals can envisage how their professional knowledge and abilities might be deployed in new contexts and in new ways and, by viewing professional situations from different perspectives, generate professional reflection, new insights, innovation and sustainable learning.

Identifying useful activities and 'boundary objects' (used here in sense of Wenger 2008, but for a wider explanation see Star 2010) that could help young professionals do this is an important focus for initial teacher education. In this chapter, I examine how participation in the Strathclyde Literacy Clinic, through its

practices of using a rich, complex and flexible set of theoretical perspectives, engaging with diverse data and peer-to-peer collaboration, enabled student teachers to develop their literacy knowledge in ways that forged professional identities that were characterised by creative, adaptive pedagogies and agentic, inquiring habits of mind.

Background: Literacy Policy and Data Use in Scotland

In the UK, education is a devolved public service. Scotland has chosen not to implement the centralised curricula, scripted programmes and high-stakes testing favoured in England. Instead, Scotland prioritises professional judgement as a central tenet of its teaching and assessment policy. It has a non-statutory curriculum offering broad guidelines for progression rather than prescription, and teachers must put 'the child at the centre' by creating nuanced classroom provision that enables "each child or young person to be a successful learner, a confident individual, a responsible citizen and an effective contributor" (SEED 2004). This offers Scottish teachers unique affordances to be creative and responsive professionals, but also makes hard demands that they make balanced, autonomous and evidence-based decisions so that teaching is tailored to fit individual student groups and the wider communities a school serves. Independent reports (e.g. Sosu and Ellis 2015) and national surveys (e.g. Scottish Government, 2015) highlight attainment gaps associated with poverty and gender, indicating that there may be some way to go to achieve this vision. National survey data yields general trends rather than specific information for schools or school districts but shows a recent dip in literacy attainment and a widening gap associated with poverty as pupils move through the school system (Scottish Government, 2015). Moreover, although 27 of Scotland's 32 local authorities bought standardised tests from private suppliers to track the literacy progress of pupils (Audit Scotland, 2014 p. 17), it is not clear how well these test data are being used to generate conversations about teaching and learning or to help professionals ensure an equitable literacy curriculum. Because of this, Scotland has reconsidered how standardised test and survey data could support professional understanding and evaluation: a new National Improvement Framework (NIF) will replace both the standardised tests and the Scottish Survey of Literacy and Numeracy, providing a variety of information on every child that can inform local evaluation and planning (Constance, 2015; Scottish Government 2016). These data might lead to system-level improvements but literacy teachers must attend to the more immediate and regular observational data that emerge during teaching if they are to teach in responsive, appropriate and effective ways.

In theory, Scotland's policy of prioritising professional judgement is a sensible way to achieve sustainable and effective gains in literacy attainment. There is no doubt that the quality of teaching has a significant impact on student achievement (see for example, Nye et al 2002) but as Cochran-Smith and Zeichner (2005) point out, few studies identify the exact teaching strategies that differentiate highly-effective and less-effective practitioners. Pianta and Hamre (2012 p.657) draw attention to the lack of a single large-scale representative study of classroom environment in US education research, contrasting this with the dozens of large-scale epidemiological studies in health. The lack of large scale studies of what teachers actually do is suprising given the clear evidence from smaller studies that certain teacher interactions make a difference to attainment. For example, Pianta et al (2008) observed early-years and primary teachers in the United States and identified several important factors correlated to attainment, such as: time on task, the number of positive and tailored one-to-one interactions, high-quality feedback that focused on conceptual development, and interesting and challenging tasks (rather than worksheets and tests).

Even fewer studies focus specifically on literacy teaching. However, in a bestevidence synthesis of the research into what highly effective literacy teachers do differently from their more mediocre colleagues, Hall (2013) reports that gains are

related to the quality, contextualisation and responsiveness of teaching rather than to specific teaching programmes, activities or content. In fact, Hall's review shows that highly effective and less effective literacy teachers actually tend to do similar activities but the highly effective teachers contextualise them more effectively, with clearer purposes and stronger links to pupils' out-of-school lives. The highly effective teachers prioritize literacy and time on task, create tailored literacy environments for their pupils and offer more precise explanations. In pre-school they create inviting, print-rich, and home-like environments, repeating literacy experiences as necessary, and are "masterful guardians, catching, cradling, and championing every child's discoveries about print" (Hall, 2013, p. 527). In the early primary years, the highly effective teachers are well planned but not bound by their planning and respond to evidence that emerges during teaching. They integrate and balance teaching the codes of literacy with activities that demonstrate meaningful uses and purposes for becoming literate. They offer varied learning experiences, ones that are intellectually, socially and emotionally engaging; they provide overt modelling but are also responsive and flexible, adept at seizing the 'teachable moment', and they create instructional density by incorporating multiple goals into a single lesson. The highly effective teachers teach a range of reading cues (graphophonic, picture, syntactic and semantic), coaching children to use them in the context of reading actual texts rather than simply modelling, explaining or practicing them as decontextualized skills. Importantly, they judge the challenge of tasks well, and are expert at getting pupils to work at a level of 'easy difficulty'. Their classroom management is good with well-established routines that teach pupils to be self-regulated and independent (Hall, 2013).

Learning to Become A Literacy Teacher

Although expert teachers appear to enact their knowledge as a seamless 'regime of competence', Wenger-Trayner and Wenger-Trayner (2015) point out that it is actually a diverse landscape in which different knowledge flows exert different

kinds of pull. Translating an "experience of the landscape, both its practices and their boundaries, into a meaningful moment of service" (ibid, p.25) is a complex, challenge for those learning to teach. It requires them to be knowledgeable, enquiring, 'noticing' and responsive. They need to have been socialised to understand, enact and value a range of theoretical perspectives and to envisage themselves as a particular kind of teacher with particular responsibilities, pedagogies, values, agency and relationship to professional knowledge (Phillipp & Kunter, 2013). Sachs (2003 p. 135) sums up the challenge as creating a framework in which teachers can construct their own understandings of 'how to be', 'how to act, and 'how to understand' (2005, p.15). Some managerial approaches to literacy education may tempt student teachers to adopt a reductive framework that engages with a very limited range of theoretical perspectives. This is akin to the situation described in the tale of 'six blind men viewing an elephant' wher each describes the elephant in a different way depending on the part they touch: when data (and knowledge flows) are limited, it is impossible to get a handle on the whole beast. The alternative, complex, model of literacy teaching requires student teachers to align their work with a richly diverse and intricate set of theoretical perspectives and practices around literacy learning. Engaging with these in the context of practical work results in rich, flexible and innovative ways of thinking about literacy. In this way student teachers develop deeper and richer understandings of both those knowledge communities that are core to their professional knowledge and those that are peripheral, and understand the insights each offers. Making student teachers alert to noticing and using a variety of observational data to inform their teaching can prompt this reshaping of professional knowledge and contribute to rich and complext identity-formation (Wenger-Trayner and Wenger-Trayner, 2015)... As outlined in the introduction, these data include data about a child's cultural capital, cognitive knowledge and skills, and their social identity as a learner, a reader and a writer. Working across epistomological positions, helps student teachers to see exactly what is involved in the complex behaviour we call 'learning to read' and to understand the myriad reasons why one child may experience reading problems where others do not. It helps them become at once more holistic and more analytic about how to intevene, taking account of the affordances and constraints in the environment to move towards a child-focused, context-sensitive and responsive model of literacy teaching.

Knowledge about literacy theory and development therefore matters. Student teachers need opportunities to navigate and reify theoretical knowledge if they are to develop useful professional insights. Making (and balancing) observational data from different epistomologies, and acting on them appropriately in real situations allows student teachers to experience how feels to keep literacy teaching grounded, nuanced, fluent, and responsive. It becomes part of their professional identity to knowingly integrate these observations with their domain-specific research knowledge, pedagogical content knowledge, subject knowledge, interpersonal skills and the local protocols for teaching. Refecting from different perspectives can lead to new professional insights. Reification thus happens when student teachers are positioned to exercise their literacy knowledge in contexts where they have agency to determine priorities, make decisions, to act and to reflect on them.

It is often assumed that for student teachers this learning takes place during school placements. However, wider power structures that shape the organisational and social context of school placements may not position student teachers to do this. In their study of Irish student teachers learning to teach English, Hall et al (2012) found that the desire to 'pass as a teacher' meant the student teachers did not position themselves as learners: They did not ask questions, discuss what was difficult, or access and discuss the varied practises and knowledge of experienced practitioners. Rather than 'legitimate peripheral participation' (Wenger 2008) the Irish student teachers were marginalised. With no-one to facilitate their negotiation of meaning or legitimize their agency as learners, the student teachers adopted restrictive 'control and management' views of professional competence and narrow 'knowledge and skills' criteria for pupil learning. They did not see teaching "... in

terms of [the pupils'] possible interests, current experiences, aspirations for the future" (Hall et al., 2012 p.110).

Jacobs (2014) found North American student teacher placement experiences to be similarly lonely and isolated. She argues for placements to be reconceptualised as a 'borderland space where negotiations can be made more explicit, assumptions can be brought into question and participants ... engage in active negotiation of meanings, rather than assume unchallenged definitions" (2014, p. 177). She suggests providing spaces outside placement for student teachers to engage in supportive, inquiriing, collaborative and enabling discussions.

The Strathclyde Literacy Clinic

The Strathclyde Literacy Clinic is an example of such a new space, one designed to develop student teachers' knowledge and agency The clinics operate in high-poverty schools in Glasgow, Scotland, and are a half-way space between the school-based practicum and university learning. Any student teacher on the Primary teaching course at Strathclyde University can volunteer to take part and Final-Year students may choose to participate for academic credit. Student teachers typically work in the Literacy Clinic for a 10-week block (one semester). About 80 students participate each year, with some volunteering one year and participating for credit the next. The driving philosophy is that Primary student teachers should know what it feels like to make a lasting difference to a child's life by teaching them to read.

The clinic operates with teaching teams that consist of four student teachers who work with one child, usually aged 7-10 years and from a low income background, who has struggled to learn to read. Each team member provides a 30-minute, one-to-one teaching session per week, so one student teacher goes on Mondays, another on Tuesdays, a third on Wednesdays, and so on. All team members collect

observational data about the pupil and the group discuss and agree the best ways forward. They identify those learning priorities likely to give the biggest payoff, the learning mix they should provide and the pedagogies and resources likely to work. The clinic is impact-focused, with the emphasis on using data that draw on multiple perspectives and on noticing and responding fluently to new information as it emerges during teaching sessions.

After each teaching session, the student teacher writes brief notes in a pupil-file that is kept in school. The notes will include any new observations/ data that emerged during teaching and evidence of progress. It might, for example, include observational data or key points about the child's wider funds of knowledge, experiences of literacy, key people and role models at home, the child's confidence, literacy aspirations or learning networks at home or school and notes about comprehension issues, fluency, running records, text levels or miscue analyses. The team members will also note thoughts about key actions and learning priorities and will telephone the next-day's student teacher with a brief update. The teams hold formal and informal meetings to share knowledge and to discuss and agree the team's priorities. Support is provided by weekly tutorials where teams discuss data, critical incidents dilemmas and suggestions with university staff.

The model is expressly *not* designed as a vision of practice that promotes individual, withdrawal teaching as a strategy for classroom intervention. Instead, it presents a space for student teachers to think within and across the theoretical domains of cultural capital, social identity, and cognitive knowledge and skills as they apply to one child. Through this they develop, and learn to orchestrate their professional knowledge, to work out how to provide effective reading instruction and coaching. They are assisted by a collaborative setting which offers inter- and intra-group mutual supports and a focus on actively constructing literacy instruction that builds from, and on, the child's cognitive knowledge and skills, cultural capital and identity as a reader. A three-circle venn diagram(see Figure 1) helps them to do this. Student

teachers collect information around the three domains of: the child's socio-cultural experiences (including their funds of knowledge, home literacy practices, key people and experiences outside school); their personal-social identity (including their interests, social networks and how they position themselves and are positioned by others as a literacy learners at home and school), and finally the cognitive knowledge and skills the child has (including knowledge of how literacy 'works' and ability to understand texts). acts It acts as a 'boundary object' (Star 2010) - a lightly-specified tool to help team members notice and broker data from different domains of academic knowledge and to locate themselves, their practices and the child in relation to these. They collect, share and balance what they know in relation to the child, the resources and their teaching. This process of alignment and negotiation helps individuals and teams to deepen their own knowledge of the domains and negotiate across the domain boundaries to understand the influences on learning for different readers in different ways.

[Insert Figure 1 about here]

The focus is on responsive, informed, fluid teaching, judged by its impact on the child, rather than indirectly by the quality of procedural supports and guides to action such as lesson plans or activities. The student teams continue to add information throughout the teaching period, monitoring and revising priorities as more data emerge. The framework is designed to promote a group dynamic that creates shared knowledge, responsibility and agency, and purposeful, pupil-focused preparation and thought.

The research

This chapter reports interview data from the first two cohorts of student teachers about their professional learning in the literacy clinic. All student teachers were invited to participate in research interviews after completing their Clinic experience.

Written advice explained that the purpose of the interview was to explore the nature of the students' experiences, what they had learnt and to offer feedback and advice to the teaching team in order to benefit future cohorts. Anonymity was assured and the written request inviting participation explained that choosing to participate or not and anything that took part in the interview could not affect their grade. From those who responded, thirty student volunteers were randomly selected for semi-structured interviews lasting between 25mins and 1 hour, with an average interview time of 40 mins.

The interviews were conducted by a contract researcher, unknown to the students but highly experienced in qualitative educational research. The time and place were chosen for mutual convenience. All research processes and tools were scrutinized and approved by the university ethics committee. The interviewees gave written consent and had the right to withdraw at any time and all were allocated pseudonyms.

A detailed summary was made of each interview, keeping as close as possible to the students' own words. Interviewees were invited to confirm these as accurate and to add additional information or examples. This ensured that the written accounts were a full representation of the interviewees' views. The summaries were forwarded to the research team with details of each student teacher's gender, agerange, year group, participation mode (volunteer or academic credit) and a self-assessment of their attainment so far on their degree course ('doing well', 'about average' or 'struggling in some areas'). Three researchers read and re-read the interviews and categorized responses to create an analytic hierarchy following the process described by Ritchie et al. (2003). The analysis was framed by sociocultural concepts of identity, participation, alignment and imagination (Wenger-Trayner et al. 2015).

Results and Discussion

The results and discussion presented in this chapter describe some ways that the student teachers' experiences in the Strathclyde Literacy Clinic, and the sense they made of those experiences, helped them construct ideas about 'how to be', 'how to act' and 'how to understand' (Sachs 2003 p.135) their professional role as a literacy teacher, which led them to enact literacy instruction in new, and creative ways.

The interviewees describe how the data on cultural capital and identity led them to construct new ideas about 'how to be' as literacy teachers. They gained insights into the pupil's lived experience at home and school and recognized the discontinuity. For many there was a shift in their understanding of the role that adaptation and advocacy might play in their teaching, and a new, more explicit understanding of the hidden, mental analysis involved in responding to the child. In learning 'how to act', the student teachers describe how they adapted the contexts, tasks and explanations of the literacy curriculum in ways that privileged the child's expertise or provided a strong(er) bridge from home to school. This created a new, child-level coherence that positioned the child powerfully to drive his/her own learning. In learning 'how to understand', the student teachers reflect on the nature of their participation and how this shaped professional learning and identity.

Learning "How to Be": Connecting Lives and Learning

Teachers have scripts that govern their understanding of events and these draw on particular knowledge domains and views of literacy (Evans 1989; Marsh 2003). Few Scottish student teachers have direct experience of poverty, and strong subthemes emerged around the student teachers' understanding of what it is like to live in hugely disadvantaged circumstances and the implications of this for literacy learning and for literacy teaching. Katz (1991) argues that school can be an "alien institution" for children whose home/community experiences differ from those assumed by teachers, and Heath (1982) shows that children are disadvantaged where there is a poor match between home/ community experiences and school expectations. Georgia, a final year student teacher, had previous placements in

disadvantaged areas but gained new insights into the range of gaps and disadvantages the child faced. The opportunity afforded in the Clinic context to focus on one child created empathy, which was harnessed to agency:

"I was quite disturbed by it. A real eyeopener. I was shellshocked by what he couldn't do and most of all his negative view of reading. I still worry about his future. I did find the experience enjoyable in a strange way though, especially getting him to open up, but it was still upsetting. Children are so honest - he didn't even realize what he was saying about his home life, but at the same time that was very, very motivating. I wanted to try really hard for him." (Georgia, Final Year student).

Moll and Cammerota (2010) argue that teachers need to understand, and build from, the bodies of beliefs, ideas, experiences, activities, skills and abilities – the funds of knowledge - that children accumulate in their families and home communities. Seeing literacy from the child's perspective, recognising and working from the child's historical cultural and emotional hinterland to understand what matters, was a common theme in the student teacher interviews. Steve, a Year 3 student recognised the importance of attending to these data rather than making assumptions:

"You have to have patience, and take into consideration what they are interested in and be prepared for his own attitudes – you can't assume how they will feel about reading ... that's what you work with"

(Steve, Third Year student)

Esteban-Guitert and Moll (2014) remind us that it is important to assume that children are competent and rational, but their different funds of identity impact on how they participate in the learning environment. Katz (1991) points out that, faced with a big divide between what they know and what they are assumed to know, children may respond by appearing to be uninterested and passive (1991 p.101). Ivor, a final-year student teacher, recognised these as consequences of schooling

and how they impact to position children as less competent literacy learners, but also saw that this is not inevitable and that pupil disengagement can be reversed:

"I stay in [a high-poverty area] so it was what I thought it was going to be, but the experience itself was still quite humbling. ... It was hard, being as we were all so aware of his situation and we had to keep it in mind the whole time - what he was like, how he might be seeing it. But working in this project reinforced the fact that children <u>do</u> want to learn – I think it did that for all of us, our team – it just brought it home that he did enjoy reading, given the opportunity, and if he was shown how to do it. It reinforced what the teacher's role really is – it definitely reinforced that."

(Ivor, Final Year student)

Working in the Literacy Clinic offered a different social and power dynamic from school placement teaching, helped by an impact-based context that focused on the fluidity of professional judgments. It shaped a different kind of professional self, one based on learning through enactment. For many it presented a new way of 'learning how to be' as a teacher. Hannah describes how responding to knowledge as it emerged during teaching events prompted her to have an internal discourse about teaching and learning that was rich, analytical, evidenced and obviously, for her, a new way of thinking about teaching:

"I learnt to teach on the spot, alone without a script. Like, as he was reading I was thinking of ways to help his understanding. It was responsive what we did – we had to look at what he did and find ways to make it better and make progress".

(Hannah, Final Year student)

On the whole the interviewees were articulate about the novelty, the demands, and the professional learning rewards of their of their 'Clinic' experience. Ivor described how his profesional knowledge developed through enactment, negotiating meanings and considering a rich data-set. His learning experience was clearly validated and enhanced by being entwined in the broader emotional, social and intellectual context of the joint enterprise:

"I felt that this experience gave me more confidence about the kinds of things to look for, how to support children. It really was a two-way impact, me and [the pupil] learned from each other. His confidence went up and his face lit up when he came out to do his work. I was gutted when the project came to a close".

(Ivor, Final Year student)

Others were less articulate but felt that *something* was different:

"I couldn't put it into words. I really can't say exactly what it was. I just became a lot more aware of the child's needs. It was more focused, concentrated, and the relationship was a lot closer. You really find out your child's needs".

(Ethel, Third Year student)

Learning "How to Act": Alignment and Agency

The student teachers described how the process of priviliging data from different knowledge domains created nuanced teaching activities and interactions in which they sought to act in ways that connected to pupils' lives. They were not teaching simply to 'follow the plan' or 'deliver an activity' but made active and responsive decisions in the light of their data. Kathy described how realigning her professional understanding to cover more than cognitive knowledge and skills led her to reframe her understanding of what it means to 'start with the child' and redefine her actions around the context of the child. Her ideas about 'how to act' like a literacy teacher now included building from the child's experiences and world-knowledge rather than just his cognitive knowledge and skills, and she saw that this helped the pupil to gain control as a reader and as a learner:

"Now I understand the importance of contextualizing things. Developing activities that are based on the child's need –I already knew that mattered -but what I think now is you need more, because that's not enough. You need to put it into context for her too – lots of context. Otherwise it is like teaching someone to swim without going in the water – without lots of context she can't get enough purchase to push her own way through".

(Kathy, Final Year student)

For another student, Devora, realignment involved attending to data about the child's funds of knowledge and identity. Her group re-framed how some tasks were presented to position the child's artistic ability as central in the activity. They recognized that because this was something he was good at, and that he felt good about, it could become a positive bridge into literacy. She talks about using drawing to provide a 'more relaxed environment', and it isn't clear whether she is referring to the teacher's environment (i.e. that the team 'relaxed' their cultural scripts about what literacy teaching in school should look like in order to embrace a broader teaching practice landscape), or to the child's environment (i.e. that the child was more relaxed because he was building from a stronger identity, based on his competence):

"His mother didn't read or write but we found he was really good at art and although it was a battle to get him to even come out of the classroom at first, we could really use his art skill to reach out to him. By the end he was able to write and he could read a book. There was such a huge difference. The key was making it personal through his drawing ... it was a more relaxed environment and seemed to help him".

(Devora, Final Year student)

Ivor describes how, in his teaching, he actively sought to bridge two knowledge domains by taking time to explain the hidden assumptions of the teacher's script he was adopting:

"I think it was how important it is to tell him *why* he is doing this (learning to read) emphasizing the kinds of things that reading will let him do that he wants, and I realised I need to explain every wee [tiny] thing so I said 'Why I am asking you these questions about this book, it isn't to test you or to catch you out, but I want to show you the sorts of things that readers think about when they read. That's what my questions are doing'. It is important to let him in on the "secret of teaching..."

(Ivor, Final Year student)

<u>Learning 'How to Understand': Agency in the Landscape of Practice</u>

The above ideas about 'how to be' and 'how to act' as a literacy teacher are different from the constrained, skills-focused judgments that Hall et al. (2012) report their students making. However, the Strathclyde interviewees explained how they too had operated to narrower cultural scripts and understandings on their traditional school placements. Hall et al (2012 p. 105) write that "...the person, even the self-reflective professional – is never entirely the independent author of her or his own actions, beliefs, capacities and competencies." The Strathclyde interviewees described the power relations and performativity of traditional school placements, and how these shaped their participation, their agency and their ideas about 'how to understand':

"I don't think the Uni [university] really understands what its like for us on placement. You're told what to do – you've got a hundred things to do so you don't really make decisions. It's pressure, pressure, pressure and even if you think things aren't right, you can't change them – you're in someone else's class, it's their space, so it's by tiptoe - wee bits, nothing major. And you

might not see much reading being done – I didn't see any in my last placement.

(Morag, Final Year student)

Learning how to understand may mean learning to recognize the gaps and constraints in a professional learning context. The interviewees described how the tacit assumptions of school placements meant they were rarely, if ever, required to make diagnostic professional judgments about individual children and their literacy. This was true even when they taught pupils who struggled. Monica, a student teacher who identified herself as 'doing well' at the top of her cohort, appeared somewhat amazed that she and her friends had not noticed this before:

"It's the first time I've ever made decisions like this – It's never been my call before –and I'm final year. We were talking about this the other day: If they can't read on placement, the class teacher already has them on a program and you do that [i.e. the program]. They've decided how to fix it, you just do it."

(Monica, Final Year student)

Hall et al (2012) report that Irish student teachers, marginalised on school placements, responded by concealing themselves as learners to appear competent and 'teacherly' and that this shaped their professional identity in unhelpful ways (2012. P. 107). In the Literacy Clinic, the group accountability, peer-collaboration and the project's intellectual location within the university made a flatter power-structure in which it was possibly a bit easier for the student teachers to assume agency, handle risk and position themselves as learners. They shared risk and common purpose within the group, which reduced individual stress and built confidence, self-efficacy and agency even when the students did not know each other particularly well. The 'boundary object' of the Three Circles focused data-

driven formal and informal discussions that offered opportunities to negotiate meanings, pool experiences, and to share ideas and practices, as Julia explained:

"Having the group was good. We pooled ideas and it improved resources and [my] confidence, and helped with planning. I worried whether or not I was doing things right but ... it was a positive experience for me having the support of the group - we could talk about what we were doing and what worked"

(Julia, Third Year).

The groups worked differently, and some student teachers reported only loose, although generally supportive, cohesion within the group:

"We worked as a team up to a point. A lot of what we did was our own ideas but we brought them back together and discussed them and they mightn't always be relevant. It was having someone to share things with and come up with other ways to approach it. We all did different things but within a framework. I only knew one of the others quite well. When we heard about who we were with, we all agreed to sit down and discuss what to do. We discussed the common themes we'd observed and then picked the three most important things - those we thought would give the greatest payoff. It was tricky at first working with people you didn't know, but different people had different ideas - that was good."

(Penny, Final Year re-sit student)

The peer group discussions were driven by an acceptance that there is never a single 'right way' forward. Students could disagree, argue the relevance of data or knowledge and debate the applicability of previous 'teaching scripts' to this new context. These debates shaped their ideas about 'how to understand' by making visible the processes of alignment and negotiation through experience. It repositioned individuals in relation to their professional knowledge, as Catriona explains:

"There were differences in what we saw as the best areas to tackle. We didn't agree so had to argue it out. One person had a programme she'd seen working and wanted that, but we felt it was just skating the issues, so we pushed it to first principles; here was someone who said they didn't have a single book at home, they didn't know what Viv [a tutor] says about 'a story being a comfortable place to be'.... "

(Catriona, Final Year student)

Conclusion: Identity and Imagination

Professional identity matters because it captures the knowledge, values and aspirations of student teachers, standing as both the product of professional learning and the architecture for future learning. The evidence indicates that working in the Strathclyde Literacy Clinic may allow student teachers to access professional identities and cultural scripts about teaching that differ in important ways from those they can readily access in traditional school placements or university settings. Tasking student teachers to work in teams and with a real child in a complex learning situation provided a rich landscape for professional learning. The 'Three Circles' was an effective boundary object in this context, enabling them to build and negotiate an evidence-base that drew on different kinds of knowledge domains and research paradigms. In this way the Clinic provides a different kind of professional context for reification through participation, alignment and agency. Student teachers learned to foreground different knowledge flows and kinds of data at different points and to use professional knowledge in ways that furthered their professional expertise and capabilities. Through this, they did what Esteban-Guitart and Moll (2014 p.34) suggest is important for developing professional identity: they experienced and envisaged themselves as particular kinds of teacher, using knowledge in particular ways, and engaging in particular kinds of professional learning. Justine, a final year student

Much has been written about the centrality, complexity and fluidity of professional identity and it is significant that all but two of the interviewees spontaneously spoke about how their understanding, vision and commitment to teaching literacy in particular ways was influenced by their work in the Strathclyde Literacy Clinic. Working in the Clinic is clearly not the only sort of teaching experience student teachers need, but it does appear to be an experience that shows student teachers how rich professional knowledge makes a visible difference to pupils. Despite being focused on just one child, it offers an intense experience that harnesses both their professional intellect and their emotions in ways that invite them to imagine the kind of literacy teacher they are, and will be. The final sentences of this chapter go to Alice, a final year student, who captured a view that was expressed by many:

"It's every teacher's dream to be able to work with one child and make a real difference. We've had that chance. We know we have the knowledge to do it and we know what it feels like and that's made us different teachers. I'm not the same teacher now as I was before this. I think differently about literacy and about teaching".

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Figure 1: Three Circles as a boundary object.

activities, home literacies

Cultural capital & beliefs, ideas, experiences outside school; people, places,

for school literacy –decoding, comprehension.

Personal/social aspirations, identity & beliefs about self; how positioned as a reader & literacy learner by self & others

Cognitive knowledge, skills, engagement/practice