# Ethnography As Epistemology

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#### Introduction to educational ethnography

What makes a study ethnographic? How do researchers engage in ethnographic inquiry? In this chapter, we provide an introduction to ethnography as epistemology, that is, as a way of knowing (Agar, 2006b) or, as Anderson-Levitt (2006) argues, as a philosophy of research, not a method. Ethnography is a recursive, iterative and abductive reasoning process (logic), a logic-in-use (Kaplan, 1964/1998), not a predefined set of steps or fieldwork methods. Although specific theories or disciplinary perspectives guiding a particular study differ across traditions, ethnographers share a common goal: to learn from the people (the insiders) what counts as cultural knowledge (insider meanings). This goal guides ethnographers, whether they are constructing a study of a society, family, social group, classroom or social process (e.g. literacy, science or learning), or tracing an individual (Mitchell, 1984). To identify cultural knowledge that members need to know, understand, predict and produce (Heath, 1982), the ethnographer engages in a range of decisions, including:

- selecting phenomena to study ethnographically;
- constructing an orienting framework to guide participant observation processes;
- · selecting methods and resources (e.g. interview-

- ing, writing field notes, video/audio recording, collecting artefacts, documents and/or photographs);
- identifying angles of recording (e.g. teacher's, student(s)', a particular group's or individual's);
- examining how factors outside of observed spaces impact what is happening;
- archiving records (present and historical);
- identifying rich points as anchors for analysis;
- constructing data sets from archive for analysis (i.e. producing data);
- constructing grounded accounts to develop explanations of observed events and/or phenomena;
- making transparent the logic-in-use in published accounts.

The particular ways that ethnographers engage in each process depend on theoretical and disciplinary perspectives guiding their logic-in-use.

#### On ethnography as a logic-in-use

In arguing that ethnography is not a method but a logicin-use, we draw on Agar's (2006) conceptualisation of ethnography as a non-linear system, guided by an iterative, recursive and abductive logic. Ethnographers construct systems to learn what members of particular groups need to know, understand, produce and predict as they participate in events of everyday life within a group. Thus ethnographers strive to identify patterned ways of perceiving, believing, acting and evaluating what members of social groups develop within and across the events of everyday life (Anderson-Levitt, 2006; Atkinson et al., 2007; Heath and Street, 2008; Walford, 2008). From this perspective, cultural knowledge is socially constructed in and through languacultures of particular social groups (Agar, 1994, 2006a). As Agar (1994) argues, *language* is imbued with culture and *culture* is constructed through language-in-use; the two are interdependent and cannot be separated.

In education, ethnographers enter a classroom, school, family group or community setting to identify insider knowledge by asking questions such as:

- What is happening here?
- What is being accomplished, by and with whom, how, in what ways, when and where, under what conditions, for what purposes, drawing on what historical or current knowledge and resources (e.g. artefacts, meanings, tools), with what outcomes or consequences for individuals and the group?
- To what do individual members of sustaining groups have access, orient and hold each other accountable?
- What makes someone an insider or outsider of particular groups (e.g. class, group within a class, peer group or social network)?
- What counts as disciplinary knowledge (i.e., mathematics, science, social science or art) in this particular group or classroom?
- What roles and relationships, norms and expectations, and rights and obligations are constructed by and afforded members?
- How does previously constructed cultural knowledge support or constrain participation in, or create frame clashes with, local knowledge being constructed in a particular event (or social group)?
- How do decisions beyond the group support and/ or constrain ways of knowing, being and doing afforded members?

Questions such as these have been used to guide ethnographic research in education as well as ethnography of education in other disciplines (e.g. anthropology, sociology, applied linguistics and technology-based disciplines) (Green and Bloome, 1997; Heath and Street, 2008; Warschauer, 2004). Walford (2008) argues that by asking such questions the 'ethnographer tries to make sense of what people are doing . . . and hopes gradually to come to an understanding of "the way we do things around here" (Deal, 1985)' (Walford, 2008: 7). These questions acknowledge the dynamic processes involved in constructing common knowledge (Edwards and Mercer, 1987) within social groups, and how, through a process of acculturation, knowledge in classrooms and other social spaces is constructed against a tapestry of cultural knowledge developed previously by members in other social contexts (e.g. other classrooms, families, peer or community groups) both in and out of schools (Lima, 1995).

By exploring common cultural knowledge through a non-linear, abductive, iterative and recursive logic-in-use, ethnographers develop grounded explanations for patterns of practice, or roles and relationships, and other social phenomena. To construct such explanations, ethnographers make principled decisions about records to collect and pathways to follow in order to explore the roots or routes associated with a particular meaning, event or cultural process/practice. Ethnographers also make decisions about ways of archiving, analysing and reporting accounts of phenomena studied.

Central to the ethnographic logic-in-use are moments where ethnographers are confronted with a surprise or something that does not go as expected. Such moments of frame clash become *rich points* as the ethnographer strives to shift his/her point of view (POV1) to that of the insiders' (POV2) in order to resolve the clash in expectations, frames of reference or understandings of what is happening. At such moments, Agar (1994) argues, cultural expectations, meanings and practices are made visible to ethnographers (as well as members). Rich points, therefore, provide anchors for tracing roots and routes of developing cultural knowledge to build warranted accounts of phenomena from an insider point of view.

# Exemplars of educational issues, topics and directions

To make visible a range of topics, issues and directions that have been studied ethnographically in education, we present a sketch map of programs of research across national contexts:

- cross-national comparative studies of education and policy–practice relationships (Alexander, 2001; Anderson-Levitt, 2002; Castanheira, 2004; Kalman and Street, 2010; Rockwell, 2002; Street, 2005; Tobin et al., 2009);
- community-based studies of cultural processes and practices (Brayboy and Deyhle, 2000; Delamont, 2002; Heath, 1983; Philips, 1983; Spindler and Hammond, 2006);
- impact of changing policies on opportunities for learning and teaching (Carspecken and Walford, 2001; Levinson et al., 2002; McNeil and Coppola, 2006; Smith et al., 1987; Stevick and Levinson, 2007; Troman et al., 2006);
- linguistic and cultural differences between home and school (Cazden et al., 1972; Gonzalez et al., 2005; Vine, 2003);

- literacy and discourse practices in homes, schools and communities (Barton and Tusting, 2005; Bloome et al., 2005; Jennings et al., 2010; Martin-Jones et al., 2008; Orellana, 1996);
- peer culture and social development in school and community contexts (Corsaro, 2003);
- learning and teaching relationships as social constructions in classrooms and other educational settings (Edwards and Mercer, 1987; Green and Wallat, 1981; Jeffrey and Woods, 2003; Mehan, 1979; Rex, 2006; Santa Barbara Classroom Discourse Group, 1992a, 1992b);
- disciplinary knowledge in science (Brown et al., 2005; Freitas and Castanheira, 2007; Lemke, 1990), mathematics (Street et al., 2005), medicine (Atkinson, 1995) and literacy (Bloome et al., 2005; Cochran-Smith, 1984), among other subject matter, as social constructions in educational contexts;
- ways that access to technology in schools is shaped by policy decisions and instructional processes inside and outside of classrooms (Kitson et al., 2007; Warschauer, 2004).

These studies demonstrate the breadth of *ethnographic* research in education and the range of questions of global,

 Table 39.1
 Principle one: ethnography as a non-linear system

Principle of operation	Conceptual issues	Actions implicated
Abductive logic guides identification of pieces of cultural knowledge which are made visible when the ethnographer identifies a frame clash which cannot be understood without further exploration.	To construct an explanation of cultural processes, practices, meanings and knowledge previously unknown, the ethnographer uses abductive logic, and recursive and iterative processes.	Using abductive logic involves:

national and local concern arising in the complex social, cultural, linguistic, economic and political contexts in which education is conducted.

# Principles of operation guiding the actions of the ethnographer

In this section, we describe the principles of operation (Heath, 1982) guiding the decisions ethnographers make in constructing their logic-in-use. To make visible how the proposed principles of operation guide decisions and actions in the field and during analysis, we present an if...then... logic that links the principles of operation to conceptual issues and then to actions implicated by the principle. This approach to linking principles and actions can be stated as follows: if x is a principle, then y are particular kinds of decisions ethnographers make in planning, undertaking, analysing and constructing warranted accounts using ethnographic records. As part of this process, we refer to a range of tools and methods ethnographers draw on to record everyday life within a group, and to gather insider information about meanings of the processes and practices, norms and expectations, and roles and relationships constructed, and used by, members of social groups.

### Principle of operation one: ethnography as a non-linear system

The first principle of operation is framed by Agar's (2006b) conceptualisation of ethnography as a nonlinear system guided by abductive, recursive and iterative logic-in-use (see Table 39.1).

Implicated in this principle is the time needed in the field for a particular ethnographic study. Given the ethnographic goal of following full cycles of activity to explore cultural knowledge, ethnographers have engaged in principled studies with different time scales. Some have undertaken longitudinal studies of one to ten years (e.g. Anderson-Levitt, 2002; Green and Heras, 2011; Heath, 1983; Smith et al., 1987); others have used an ethnographic logic-in-use to examine smaller segments of life (Mitchell, 1984); still others have elected to trace individual actors across particular social spaces as they learn how to engage in particular

activities (e.g. juggling: Heath and Street, 2008; being a principal: Wolcott, 2003). Additionally, some have examined artefacts/records (video or written) of life in social groups collected by others (Castanheira et al., 2001; Skukauskaite and Green, 2004). From this perspective, what makes a study ethnographic is not the length of time involved but the logic-in-use guiding the researcher's decisions, actions and work across all phases of the study.

### Principle of operation two: leaving aside ethnocentrism

Principles two to four were proposed by Heath (1982) in her seminal article 'Ethnography: Defining the Essentials'. Principle two captures a stance that ethnographers take to *bracket* their own points of view, expectations or interpretations in order to identify insider knowledge.

As indicated in Table 39.2, the principle of leaving ethnocentrism aside is a goal that leads to a range of actions designed to support ethnographers in uncovering and identifying insider knowledge as proposed by members and made visible in the chains of actions and discourse among members. This principle is designed to remind ethnographers that setting aside their own expectations is critical so that they can explore insider points of view.

## Principle of operation three: identifying boundaries of what is happening

One challenge facing ethnographers is the identification of event boundaries. This process involves identifying how members signal what they are doing together and when they are changing their collective activity. Furthermore, by examining the discourse of a developing event, ethnographers are able to identify references to previous events, meanings previously constructed or actions previously taken related (i.e. intertextually tied) to the developing event. Through this process of examining how and what members propose, recognise, acknowledge, interactionally accomplish and mark as socially significant, ethnographers examine multiple levels of timescale and knowledge made visible in a particular social event (Bloome and Egan-Robertson, 1993).

 Table 39.2
 Principle two: leaving ethnocentrism aside

Principle of operation	Conceptual issues	Actions implicated
Fieldworkers (and analysts) should attempt to uphold the ideal of leaving aside ethnocentrism and maintaining open acceptance of the behaviours (actions) of all members of the group being studied (Heath, 1982: 35).	To suspend belief, ethnographers strive to use emic, or insider language and references, whenever possible by:  • identifying insider names (folk terms) for particular activities or phenomena (e.g. 'the Island History Project', 'continuous lines', 'first year students'); • locating verbs (and their objects) to identify past/present/future actions and connected activities (e.g. 'take out your learning logs', 'we'll plan a fashion show', 'when we do public critique'); • tracing chains of interactional exchanges (not individual behaviours) to explore what counts as local knowledge.	Bracketing one's expectations about what is happening involves examining what members:  • propose, orient to, acknowledge and recognise as socially (academically, institutionally or personally) significant within and across times and events; • jointly (discursively) construct and name as actions and events; • construct as norms and expectations, roles and relationships, and rights and obligations; • draw on past events in a developing event; • make visible to the ethnographer (or other members) in points of emic-etic (insider—outsider) tensions.

Challenges facing ethnographers in identifying the boundaries of events, and making them transparent, are presented in Table 39.3.

As indicated in Table 39.3, central to the chain of reasoning associated with identifying and establishing

boundaries is a conceptual argument that events are constructed by members in and through discourse and actions among participants, and that an event may involve multiple levels of timescale and activity. This conceptualisation of events as dynamic and

 Table 39.3
 Identifying boundaries of events

Principle of operation	Conceptual issues	Actions implicated
When participation in, or adequate description of, the full round of activities of the group is not possible, fieldworkers should make principled decisions to learn (from participants) and to describe as completely as possible what is happening in selected activities, settings, or groups of participants (Heath, 1982: 35).	To make transparent the logic-in-use constructed in deciding boundaries of events, ethnographers make principled decisions about:  • what and whom to observe, examine closely or trace across times and events; • how boundaries of the <i>field</i> for a particular observation are being proposed, recognised and acknowledged; • how members of a developing event signal to each other (contextualise) what is said or done.	Constructing records for analysis depends on:  • how fieldnotes are written; • what is recorded on video/audio, from whose perspective, focusing on what objects, actors or activity; • what artefacts, documents or photographs are collected; • how event maps of activity are constructed to locate actors in time(s) and space(s); • what kinds of interviews are conducted of whom, under what conditions and for what purposes; • how records from the field are archived to permit search and retrieval of interconnected texts, contexts and events.

developing, as potentially existing across time(s) or as interconnected texts or processes, means that ethnographers, as part of *fieldwork*, need to make transparent the boundaries of particular events (i.e. units of analysis). Thus, to trace cycles of events and to identify levels of analytic scale necessary to understand the knowledge members are drawing on to participate in a developing event requires that ethnographers remain in the field for extended periods of time (Smith, 1978).

### Principle of operation four: building connections

The fourth principle, building connections, captures the ethnographic goal of making connections between one bit of life and others in order to construct, through a process of contrastive relevance (Hymes, 1982), warranted claims about what counts as cultural knowledge and to develop grounded explanations of social phenomena. Ethnographers (or analysts using an ethnographic logic-in-use), whether participating in the field or reconstructing a data set from archived

records, select rich points around which the data set for a particular analysis will be constructed or additional records collected. This final principle, like the previous ones, involves an iterative, recursive, abductive logic to construct explanations of previously unknown knowledge of cultural activity and meanings that insiders know, understand, predict and produce to participate in everyday events. Table 39.4 describes the principle and the implicated logic and actions.

As indicated in Table 39.4, the development of an archiving system that supports ethnographers in searching and retrieving bounded events or bits of social life observed in time and space is a critical dimension of ethnographic work. This archive is important given that, while connections may be traced in the field, the analysis most often occurs after ethnographers leave the field or between planned fieldwork sessions. The final principle of operation, therefore, lays a foundation for a key aspect of the ethnographers' task: connecting different cultural activities, actions and meanings through a process of contrastive analysis in order to construct conceptually framed explanations or accounts of the cultural phenomena under study.

 Table 39.4
 Principle of operation four: building connections

Principle of operation	Conceptual issues	Actions implicated		
Data obtained from study of pieces of the culture should be related to existing knowledge about other components of the whole of the culture or similar pieces studied in other cultures (Heath, 1982: 35).	Ethnographers construct evidence of connections among events to develop grounded claims and explanations of cultural phenomena and local knowledge.  Ethnographers create an archiving system that permits search and retrieval of relevant records by including:  • cross-reference of records by date and place of collection;  • event maps and transcripts of events, activity and actors;  • citations to particular bodies of literature informing the work.	To analyse particular bits of cultural knowledge, discourse or social life, ethnographers engage in contrastive analysis that includes tracing developing cultural knowledge, processes or practices across time(s), actors, and events.  Each analysis in an ongoing ethnographic study involves making visible relationships among:  • questions brought to and identified in situ  • types and amount of data collected; • analysis processes/approaches used for each question and data analysed; • literature guiding each dimension of ethnographic work.		

 Table 39.5
 Interconnected analyses of student performance

Frame clash/rich points identified year two: 1999–2000	Guiding research questions generated for each analysis	Data retrieved and/or generated from archived records
Analysis 1  Kristen, a fourthyear student, told the ethnographer that if he wanted to understand what was important to know, then he needed to look at public critique (Baker, 2001).	What were the roots of public critique?  What were the connections between public critique and earlier cycles of activity?  What knowledge was necessary to participate in public critique from an emic perspective?	Transcription of public critique.  Provide demographic information that includes percentage of new students each year entering class and teacher's history with programme.  Construct event maps at different levels of timescale:  identify critique cycles for two years of observation;  construct detailed event maps of each day; identify cycles of critique leading to public critique.
Analysis 2  Kristen's performance differs from students with 1, 2, 3 years in programme, which surprised the ethnographer (Baker and Green, 2007).	How did students with differing years in the programme present their public critique?  How, and in what ways, was performance across students similar or different?  What contributed to the difference between the teacher's and ethnographer's interpretation of Kristen's performance?	Transcript constructed for each student's performance and for question-and-answer segment following performance.  Analysis of transcript of teacher's responses to students.  Contrastive analysis of public critique performances and teacher feedback for four students with different amounts of time in programme.  Interview with teacher to discuss differences in interpretation of Kristen's (a fourth-year student) performance in contrast to other students with less time in the programme.
Analysis 3  The teacher responds differently to the performance of two first-year students, suggesting need to identify possible factors contributing to differences identified (Baker et al., 2008).	How did differences in the teacher's response to two first-year students create a frame clash for the ethnographers?  How did the performance of the two first-year students differ, when compared to the rubric for presentation?  How was time of entry socially and academically significant for student performance?	Transcript constructed for each student's performance and for question-and-answer segment following performance.  Differences in teacher role in providing feedback to students.  Student performance compared to rubric elements given to students to guide presentations.  Contrastive analysis of teacher feedback and rubrics for two first-year students.  Backward mapping to identify points of entry and cycles of critique experienced (or not).

#### A telling case of a logic-in-use:

### Connecting three analyses of student performance

In this section, we draw on a two-year ethnographic study in an inter-generational, advanced placement studio art class to demonstrate how the principles of operation provide a basis for examining what counts as studio art to members of the class. We draw on three ethnographic analyses to demonstrate why multiple levels of analytic scale were needed to explore what contributed to observed differences in student performance in one key event, public critique.

By exploring relationships between and among analyses for three interconnected studies, we make visible the logic-in-use of each analysis. Together the analyses presented constitute a telling case (Mitchell, 1984) about how individual–collective relationships are critical to identify factors that support or constrain student learning across times and events. This telling case also makes visible how contrastive analysis was central to constructing an explanation of what contributed to the observed differences in performance. Table 39.5 provides a description of the rich point (a frame clash) identified for each study, the questions asked and the specific archived resources selected for the contrastive analysis of student performance.

As indicated in Table 39.5, in the first study comments by Kristen, a fourth-year student, led to the identification of public critique as an anchor for overtime analysis of connections shaping performance of public critique.

Figure 39.1 graphically presents interconnected chains of cycles of activity, folk terms and insider language associated with each cycle. It also provides a detailed description of the initiating events on the first day of school as well as different points of entry of two first-year students. This figure was used for all three analyses presented, each focusing on a different root or route to public critique.

## Analysis 1: Locating intertextually tied events leading to public critique

As indicated in Figure 39.1, backward mapping from public critique to the first day of school made visible

how on the first day, through letters, the Disney video and the introduction of necessary work and materials, the teacher initiated and foreshadowed an intertextual web of processes and practices culminating with public critique. As indicated in the demographic information, across the four years of the programme, there was a growing number of new students entering the programme, creating a continually changing inter-generational community. Analysis of these data indicated that each year the class consisted of overlapping groups of students with 1–4 years of experience with the programme. Given the differences in time in the programme, students with 2-4 years were able to revisit key cycles and expand their knowledge, contributing, as the teacher argued, to differences in performances. Figure 39.1 represents the bounded events identified in Analysis 1, and provides a basis for answering the question about the roots of public critique and the inter-connections between bounded events. Therefore this analysis identified the interconnected cycles of activity on which students drew in performing public critique.

#### Analysis 2: From frame clash to rich point

Analysis of student performance observed during public critique in Analysis 1 led to identifying a frame clash and creating a rich point for Analysis 2, which focused on differences in teacher (insider) and ethnographer (outsider) interpretations of Kristen's performance. In analysing the similarities and differences in student performance, the ethnographer was confronted with a surprise: Kristen's performance did not meet his expectations and differed from the performance of students with 1-3 years of experience in the programme. Kristen did not provide details of each action she took but rather presented a more synthesised description of her process (Table 39.5). This contrast in performance led the ethnographer to interview the teacher, who characterised Kristen's performance as 'light years ahead' of the others and characterised Kristen as speaking as an artist, not talking about doing the steps or practices of art (Baker and Green, 2007). Analysis 2 therefore raised questions about limits to certainty of observed actions for the ethnographer with two years in the class, in contrast to the teacher and students with longer

	1999–2000	(53% of students enter)	
-2000)	1998–1999	(35% of students enter)	
AL STUDIO ART CLASS (1997-	1997–1998	(12% of students enter)	
.IFE HISTORY OF CLASS: TIMELINE OF INTERGENERATIONAL STUDIO ART CLASS (1997–2000)	1996–1997	[5% of students enter]	
LIFE HISTORY OF CLASS: TIN	Teacher – 29 years of	teaching	

Jun		May	Apr	Mar	Feb	Jan	Dec	Jan Feb Mar Apr May Jun <b>SEP OCT NOV</b> Dec Jan Feb Mar Apr	OCT	SEP	Jun	Мау	Apr	Mar	Feb		Dec	Nov	0ct	Sept
				2000)	(1999–	Year Two	Academic Year Two (1999–2000)	Ar									8–1999)	Jne (199	.cademic Year One (	Acader
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	_/	[53% of students enter]	tuder	53% of s		s enter	(35% of students enter)	(35% of	er)	ents en	(12% of students enter)	(12%	5% of students enter	dents ei	% of stu	5)		20	teaching	

es of activity		door dex cards and select a workbench	vity'	*Tinitiates cycles of friendly sharing: 'to-morrow I'll have a short activity that's kind of a creative activity' [occurs on 9/3]	eivingaward	m letters of past students		of concentration	
Running record of events (bold) and phases of activity	Tpreparing	Students arriving: Tgreeting students at door T talking about class preparation T instructing students to pick up two index cards and select a workbench	Ttaking roll and initiating 'index card activity' Students writing two questions T giving students envelopes Students returning index cards	Twelcoming, presenting agenda and introducing self and programme *T presenting overview day and programme Introducing Disney video Explaining links with video	Teacher plays Disney Video of teacher receiving award	Treading and commenting on excerpts from letters of past students Treading letters from four past students T explaining connections	Tintroducing work of class Letter of intent Handout; quoting Z. Hurston 'Student agendas'	Tpresenting four needs for class T introducing sketchbooks Notebooks: connection to AP and areas of concentration Folders: value of handouts Fee: cost of materials	Tdiscussing 'highlights' of upcoming year Mini-chalk festival
Clock time	9:09-9:18	9:18–9:22	9:22-9:30	9:30–9:44	6 min.	9:44-9:55	9:55-10:00	10:00-10:09	10:09–10:15

Cycles of critique

	s 10/11 Deep critique 11/16–19 Maya & James present
	Maya enter
nuque	Gentle critique
rdries of ci	Friendly sharing 9/10, 9/13
	Framing class 9/2: James enters

Figure 39.1 Intertextual cycles of activity of public critique

histories. This analysis also raised questions about the need for triangulation across actors and sources of data, in addition to tracing actors' actions and intertextual ties across times and events in order to bracket ethnocentric interpretations.

### Analysis 3: Consequences of differing entry points

Analysis 3 explored differences in the performance of two first-year students, Maya and James, differences that were not easily explained by analysis of the observed performances. In-time analysis of the developing event of public critique showed that not only was there a pattern of difference in their presentations but also a difference in the patterns of interaction of the teacher with each of these students. That is, the teacher played the questioner role almost exclusively for Maya, while students initiated questions and comments to James, with two exceptions.

The differences in both the students' performances and the teacher responses created a rich point for tracing how student points of entry contributed to the differences in observed performances. Analysis of entry points showed that James entered on the first day of class, while Maya entered one month later. The impact of the missed knowledge was identified through a contrastive analysis of the rubric given to students the day before the deep critiques began. Analysis of what each student included in their public performance showed that James included concepts introduced in all cycles of activity pre-dating public critique, including cycles presented on the first day of class. Analysis of Maya's performance showed a series of omitted elements suggested in the rubric. The missing information in Maya's presentation was traced to cycles of activity introduced during the month of school prior to her entry. Additionally, although the language and processes were present in the talk and actions of other students, the fact that she did not include them in her presentations suggested that, for Maya, they were unmarked, and were not viewed as socially or academically relevant or significant to public critique. The late entry point therefore created missed opportunities for Maya to learn particular aspects of studio art presented in the first two cycles of activity (Figure 39.1). This analysis demonstrated the importance of contrastively examining both the performance differences among students and tracing the history of particular students in order to construct grounded explanations of what accounted for the observed differences.

Together the three studies provide a telling case of the need for multiple levels of analytic scale, for contrastive analyses and for tracing histories of observed phenomena and actors in order to identify relationships among time, actions, entry, access and performance. The intertextual ties among the three studies demonstrate the generative nature of ethnographic research as well as the non-linear, abductive, iterative, recursive logic guiding an ethnographic logic-in-use, including:

- how each analysis required particular types of records and data collection;
- how different records analysed represented particular levels of analytic scale;
- how each analysis generated questions for further analysis and the construction of a new data set from archived records;
- how different levels of timescale provided a grounded basis for constructing warranted claims about factors contributing to observed differences in student performance.

Through this telling case, we also demonstrated how graphic representations provide analytic texts to explore rich points and their pathways, both within a particular analysis and across a series of interconnected analyses. The multiple levels of analyses constituting this telling case make *transparent* the recursive and iterative logic-of-inquiry necessary to develop evidence of factors leading to observed differences in student performance.

#### Conclusion

In this chapter, we introduced readers to ways of thinking as ethnographers and to principles of operation guiding the logic-in-use that ethnographers bring to and construct during ethnographic research. Through recommended readings we invite readers to explore these issues further. These readings provide insights into the ways that ethnographic research has been conceptualised, conducted and reported across national borders and disciplines.

#### Questions for further investigation

- 1. What do you think are the best ways to generate research-specific questions in an ethnographic study?
- In an exploratory data study, debate the pros and cons of structured and unstructured data collection.
- 3. What are the benefits and limitations of archival data collection?

#### Suggested further reading

- Atkinson, P. (1990) The Ethnographic Imagination: Textual Constructions of Reality. London: Routledge. Atkinson argues that all texts are rhetorical representations, shaped by authors' disciplinary backgrounds, research purposes and implicit or explicit sociological theories. Citing classic and contemporary ethnographies, Atkinson demonstrates how ethnographic texts persuade readers and create particular views of reality.
- Bloome, D., Carter, S. P., Christian, B. M., Otto, S. and Shuart-Faris, N. (2005) Discourse Analysis and the Study of Classroom Language and Literacy Events: A Microethnographic Perspective. Mahwah, NJ: Lawrence Erlbaum. The volume presents theoretically grounded analyses of classroom literacy events. By drawing on socio-cultural, socio-linguistic and discourse theories, the authors demonstrate how microethnographic research reveals the complexity of life and learning in linguistically diverse classrooms.
- Emerson, R. M., Fretz, R. I. and Shaw, L. L. (1995) Writing Ethnographic Fieldnotes. Chicago: University of Chicago Press. This book encompasses theoretical, practical, methodological and representational issues of conducting ethnographic observation, constructing and analysing ethnographic field notes and writing ethnographic reports.
- Heath, S. B. and Street, B. V. (2008) On Ethnography: Approaches to Language and Literacy Research. New York: Teachers College Press. Drawing on their own and a novice

- ethnographer's fieldwork, the authors provide theoretically grounded practical suggestions for developing and sustaining a constant comparative perspective in ethnographic work that examines co-occuring patterns of individual and community knowledge.
- Walford, G. (ed.) (2008) How to Do Educational Ethnography. London: Tufnell. This edited volume presents central processes in doing educational ethnography, including site selection, ethics, observing, interviewing, video-enabled research, the role of theory in ethnographic research, the characterisation of social settings and a critical examination of representation in ethnography.

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