EXPLORING ADULT LITERACY AND NUMERACY PRACTICES
ETHNOGRAPHIC CASE STUDIES FROM UGANDA

Edited by
George Openjuru, Dave Baker, Alan Rogers and Brian Street

UPPINGHAM PRESS
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INTRODUCTION

This book explores a key question in all forms of adult education, including adult literacy and numeracy learning: ‘how can we find out about the experience and existing knowledge, skills and practices that adult learners bring with them to their adult classes?’ The reason for asking this is to help adult learners build on their existing knowledge and skills as they develop new (literacy and numeracy) skills and practices. This book describes a training programme (LETTER) for adult literacy teachers (facilitators) and their trainers in developing countries designed to help them make their teaching more effective, but its significance for other forms of adult learning programmes is much wider.

The LETTER (Learning for Empowerment Through Training in Ethnographic Research) approach arose from a quite specific situation. Nirantar in India, an NGO dedicated to Women’s Empowerment Through Education, working with Dalit women, found that the women participating in their educational programmes held many and often strong views which were different from those of the Nirantar staff – but the women were not always conscious of the beliefs and values they held. Such experience could be a hindrance to the new learning, but equally it could be a basis for the new learning. This is important, for one basic tenet of all education is that ‘all learning builds on prior learning’, so that adult literacy education, to be effective, needs to build on the existing knowledge, skills and practices of the learners. To do that, we need to be able to find out what are those beliefs, knowledge, skills and practices, and then develop the ability to use this experiential learning for new learning.

This book – and the programme on which it is based, LETTER Uganda – consists of a marriage of three fields of study, adult education (in this case literacy and numeracy learning programmes), informal learning and ethnography. An outline of this training programme in ethnographic approaches to literacy and numeracy, as implemented in India and in Ethiopia, is provided in the publications for India (Nirantar 2007) and for

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1 In the traditional Indian caste system, this is a member of the lowest caste. They are the untouchable, scheduled caste
Ethiopia (Gebre et al 2009), as well as in Rafat Nabi’s book from Pakistan (Nabi et al 2009); it is summarised in *Adult Literacy in development: stories from the field* (Rogers and Street 2012).

The LETTER programme was originally developed in co-operation between Nirantar and Uppingham Seminars for Development (UK) after a meeting in Delhi in 2000 at a workshop organised by Uppingham Seminars on urban literacies (Rogers 2005; a fuller account of the origins is in Nirantar 2007). The first series of workshops in Delhi were funded by ASPBAE (Asia-South-Pacific Bureau of Adult Education) and other sources. Participants from Nepal, Bangladesh, Pakistan, Sri Lanka, Afghanistan and India attended. The main focus was on ways of exploring everyday literacies and numeracies in local communities using ethnographic-style methodologies. Dave Baker joined the resource team when Alan Rogers of Uppingham Seminars went into hospital, and at very short notice developed a programme of ethnographic studies for numeracy; in consequence, the title was changed from *Literacy for Empowerment Through Training in Ethnographic Research* to *Learning for Empowerment Through Training in Ethnographic Research*. He and Brian Street ran the first workshop, and Dave Baker ran the second workshop in Delhi.

A short example of the kind of ethnographic survey of local literacy and numeracy practices envisaged by the LETTER programme was given during the first workshop in Delhi; everyone was asked to go out to look at how different people managed their literacy and numeracy activities (for example, a taxi driver or woman selling goods in the market). Following the first workshop, the participants undertook a longer study at home before bringing their case studies to the second workshop for feedback and further development. A book was written and published by Nirantar based on these two workshops, *Exploring the Everyday: ethnographic studies of literacy and numeracy* (Nirantar 2007), and since then, Nirantar has been developing new teaching-learning approaches based on the findings of such surveys. The key element here is to help the literacy and numeracy facilitators (teachers) to learn about the existing community.

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2 We did for a time toy with the idea of ‘LANETTER’ but that did not work
literacy and numeracy activities of each particular learning group – indeed, to help the learners themselves to become more aware of what literacy and numeracy practices they and their communities engage in and to value those practices.

The project then moved to Ethiopia, where funding through PACT-Ethiopia enabled a group of about twenty trainers of literacy facilitators from around the country to participate in a series of three workshops. The same team of Dave Baker, Brian Street and Alan Rogers acted as resource persons with local experts, bringing in George Openjuru from Uganda to assist with the programme. The first workshop was devoted to ethnographic approaches, again with a practical example of field work during the workshop; then all the participants individually or in small groups undertook a more detailed case study at home. The second workshop developed these case studies and began work on curriculum development for adult learning programmes. The third workshop, attended by Malini Ghose of Nirantar on behalf of the India LETTER workshops, finalised both strands, and again a book was written locally and published, *Everyday Literacies in Africa: ethnographic studies of literacy and numeracy in Ethiopia* (Gebre et al 2009).

The programme then moved to Uganda with funding from the British government Department for International Development (DFID) through the British Council DELPHE Programme, linking Makerere University with Addis Ababa University (Ethiopia), Kwa-Zulu-Natal University (South Africa), Kings College London, the Institute of Education, London and Uppingham Seminars (UK). The involvement of some of those engaged on the Ethiopia (Alema Gebre) and India (Malini Ghose) programmes ensures that LETTER is a rolling programme in which both the trainers and the participant learners build on previous workshops. Ethnographic studies were completed, and curriculum building was started. The Uganda programme, including the everyday literacy and numeracy practices of the individual case studies, followed some of the procedures outlined above for the India and Ethiopia projects whilst adding distinctive features, especially a series of workshops on the writing of reading material for learners, organised by Elda Lyster of South Africa,
using ethnographic approaches to explore original (oral) material such as local stories\(^3\). Training for teaching lies at the heart of the LETTER Project.

This book is the result of the LETTER Uganda project. What follows falls into three main parts:

I: A discussion of literacy and numeracy, of informal learning, and of ethnography – asking in each case, ‘What do we mean by…?’

II: Some of the case studies of ethnographic studies of literacy and numeracy practices from Uganda written by the participants in the LETTER workshops.

III: A discussion of the findings of the case studies and an exploration of some of the ways in which the findings of these case studies can be used in adult literacy learning programmes.

This publication is offered as a contribution towards making adult literacy learning programmes more effective throughout Africa. We hope it will be widely distributed.

George Openjuru
Dave Baker
Alan Rogers
Brian Street
September 2016

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\(^{3}\) There is a strong tradition of what may be called ‘oral literacy’ in Africa, including Uganda; see in particular essays in Parry 2000; also Glasgow 2007; Perry 2008; Touray et al 2010 for similar work in Africa; for a Uganda programme in schools, see Abiria 2011.
References
Abiria D M 2011 Exploring cultural resources as pedagogical tools for language education: a case of two primary schools in Uganda, MA dissertation, University of British Columbia, Vancouver


Parry K (ed) 2000 Language and literacy in Uganda: towards a sustainable reading culture Kampala: Fountain Press


Rogers A (ed) 2005 Urban Literacy: communication, identity and learning in development contexts Hamburg: UNESCO Institute of Education

PART I: WHAT DO WE MEAN BY …?

The first part of the book deals with the three main elements of the LETTER programme –

- Recent understandings of literacy and numeracy (seen here as social practices),
- New insights into informal learning; and
- The value of using ethnographic approaches

1. WHAT DO WE MEAN BY … LITERACY AND NUMERACY?

1.1 Literacy
The word ‘literacy’ can mean many different things (for ‘numeracy’, see the next section).

*Literacy as knowledge*: For some people, the word ‘literacy’ means knowing enough about something to be able to cope with it in everyday life. Thus they speak of ‘financial literacy’, being able to understand financial matters like bank accounts and to complete common financial tasks, or ‘health literacy’, again knowing about the main health hazards and what to do about them, and so on; some have spoken of ‘emotional literacy’ and ‘media literacy’ (knowing about films and other media). In this case, ‘literacy’ means ‘knowing enough to engage with fully’; it is not specifically about reading and writing.

*Literacy as skill*: For many others, ‘literacy’ means a basic skill of being able to ‘read and write’ (in general), which a person either possesses or does not possess – a skill which needs to be taught but which, once it has been learned, changes the individual from being ‘illiterate’ to being ‘literate’. This long-standing view believes that learning ‘literacy’ in this sense is not only essential in today’s modern world but it automatically and universally brings with it many benefits - economic, social, health, cultural etc. This is sometimes called the ‘autonomous’ view of literacy (Street 1984). This is the *dominant discourse* (Lind and Johnston 1990; Oxenham 1980) in which literacy is seen as a universal skill; there is one right form of literacy which is taught in school or adult literacy classes. It is based on the (apparently self-evident) assumption that illiterates do not
do literacy until they have been taught to do it. Thus learning literacy is like a magic carpet which transfers an individual from one status to the other. This seems to accord with common sense and observable truth – there are many people who feel very different because they have learned this ‘universal literacy’, even if they do not do any reading and writing in their daily lives outside the classroom. Their identities and their self-confidence have changed.

Literacy as social practice: But literacy can be and often is seen rather differently, based on an examination of what goes on outside the classroom, in real life situations. ‘Literacy’ in this sense is ‘reading-and-writing-in-use’ in the course of daily life - at work, in the family, in the community etc (Barton et al 2000; Barton 2004; Heath and Street 2008; Papen 2005; Street 2005; Street et al 2006). This view is perhaps best expressed by talking of ‘everyday literacies’. Unlike the dominant discourse, rather than assume the absence of the skills of reading and writing (a deficit), this view assumes that literacy is everywhere, impinging on the daily lives of every individual, whether ‘literate’ or not. People who appear to be ‘illiterate’ engage in many literacy tasks in many different ways, but these may be unconscious, ‘hidden’ (Nabi et al 2009). One aim, then, is to find out what these reading and writing activities and tasks are in each particular context.

This view of ‘literacy-outside-the-classroom’ looks at what are called ‘literacy events’, happenings which involve written texts in some form or other. But it also goes behind this to analyse the ‘literacy practices’ which are involved in all reading and writing: who is doing it and why, what is the purpose of doing it? What is ‘normal’ practice in this case? In particular, a ‘literacy as social practice’ (LSP) view looks at the elements of power in the activity – who created the event and the text; who controls it? What does it mean in this context? Who has the power to name and define? (Street 2011). Some people have called this approach an ‘ideological’ approach as opposed to the ‘autonomous’ approach (Street 1984) – for reading and writing, in this view, always takes place in a particular context where all kinds of (ideological) assumptions are being made. This is true even of the adult literacy classroom – the literacy taught there is one kind of literacy (a very useful kind but not a universal literacy) and it takes place in a context
of (often hidden or assumed) power relationships between teacher and literacy-providing agency on the one hand and the literacy learners on the other hand.

When we look at literacy in this way (LSP), we see that there are many forms of literacy; some people have used the term ‘literacies’ to indicate this (as we have seen above, page …., this is not the same as ‘health literacy’ and ‘financial literacy’ etc - this is a different use of the term). The literacy that is taught in the classroom at school or in adult literacy programmes is a particularly privileged form of literacy, what may be called a ‘schooled literacy’. But there are different work-place literacies (the literacy practices of a car mechanic, for example, are different from those of a carpenter or of a tailor); there are religious literacy practices (using sacred or other texts in church, mosque, synagogue or temple); there are bureaucratic literacy practices (filling in forms etc) and many other forms of literacy. There are literacy practices relating to being born, marrying, and dying; with celebrating and with mourning, with shared community activities such as festivals and development projects, with family activities. These are all context-dependent; they are all bound up in the existing power structures and culture of the society in which they take place. None of these is universal.

And all members of the community engage with these literacy practices, whether they are ‘literate’ or not. They may do it through mediation, asking someone to help them; they may have learned enough to complete some literacy and numeracy tasks for themselves. Rafat Nabi’s important study in Pakistan showed a number of people who were called by others ‘illiterate’ (and who called themselves ‘illiterate’) nevertheless doing literacy tasks – but they either denied this was literacy or they were unconscious of what they were doing; and the case studies in the other LETTER programmes, India (Nirantar 2007) and Ethiopia (Gebre et al 2009), and our Uganda case studies (see below) all confirm this.

Although some people use the word ‘literacy’ in all three senses (see for example, the Global Monitoring Report *Literacy for Life*, UNESCO 2006), most people tend to see literacy in the second sense, literacy as universal skill. The LETTER approach asks, ‘What does our work as teachers of literacy to adults look like if we view ‘literacy’ as social practice (LSP)?
In particular, we are asking, ‘What kinds of literacy are going on in this community, in this culture?’ For unless we teach a literacy which can be used locally, our teaching will be ‘use-less’.

LSP therefore raises the question, ‘How can we find out what are the existing literacy practices in the community from which our literacy learners come?’ But before we discuss this, we need to look at viewing numeracy in the same way, as social practice.

1.2 Numeracy
This section has been written by Dave Baker. Dave Baker was educated in formal mathematics and trained as a teacher of formal mathematics. But as his work as a teacher of mathematics and numeracy progressed, he came to realise that mathematics is not neutral or value-free, and in fact encompasses vast and often hidden realms of social relations, social value and social justice. And thus it is that mathematics / numeracy, usually perceived only as an autonomous set of skills, can be seen instead as a vital and yet veiled ideological social practice. The nature of ethnographic-style research makes it an excellent way not only to understand mathematics/numeracy as social numeracy practices but also understand the ways that numeracy as social practices informs, supports or hinders and constrains people’s lives. In particular, there are power relations that surround numeracy practices. Numeracy is often used as a gate keeper to select some learners to progress onto educational programmes or into employment and reject others. For further discussion of these ideas, see Baker (2010).

It is important to make it clear that for the purposes of this project, mathematics and numeracy have been taken to be synonymous. This is not something that all agree about but to suggest that learners’ mathematics practices are different from learners’ numeracy practices can lead to an elitist view of academic mathematics practices and thereby deny the value of the numeracy practices that most adult learners engage with in their lives. This can lead to some tutors of adult numeracy having a negative view of their learners’ numeracy practices and not engaging with these numeracy practices or even building on them. This is essential to help their learners learn the mathematical skills and understandings that they want and need in order to engage more fully with problems in their lives.
The Autonomous Model and Perceptions of Numeracy: Numeracy is a very overlooked area. It usually takes a backseat to literacy, in the same way that language studies are nearly always preferred over mathematics in formal schools. The perception of numeracy is fraught with mathematics’ trauma and gender, class and ethnicity issues, power relations which provide or deny access or with mathematics being seen as difficult, boring, and often irrelevant. And adult numeracy is rarely seen as a priority, or is often merely addressed in the same way that children learn school mathematics.

In parallel with literacy, an autonomous model is at work here. Numeracy is most often presented as a set of decontextualised skills – numbers, counting, fractions, memorisation of multiplication tables, addition and subtraction, steps in solving calculations, etc. Generally only one method of solving a problem is taught, and only that method is accepted as ‘correct.’ The correctness of the final answer is what is important, not the process and not the reasoning. Numeracy is often seen from a very narrow perspective of being almost exclusively numbers and calculations using the four operations – addition, subtraction, multiplication and division. And numeracy is perceived to be neutral and removed from social values or social interactions, because numbers are seen to have a single meaning, one that is separate from context and social relations. Not only is that not valid but the narrow focus on number denies the importance in learners’ lives of problems in shape and space or the handling of data. The use of shape and space, for example, in the work and lives of builders and carpenters is vital to help them solve the problems they meet. Yet too often in adult numeracy these aspects are either neglected or totally denied.

Further, the LETTER project recognises that numeracy practices, whether they are linked to calculations or shape and space or mathematical argument, are important to adults because they help them deal with and solve problems in their lives. This could be a carpenter’s complex design of a piece of furniture or their calculations about the price they need to
sell the item of furniture to make a living. This was an event explicitly seen during the current project in Uganda and is discussed further in the first case study in Part II below. Problem solving is therefore seen as an essential part of numeracy practices.

These numeracy practices and the context and values hidden within them can be seen by looking at a seemingly straightforward numeracy question. This reveals hidden layers of inherent values:

A Question: 10 birds are in a tree. 2 get shot. How many are left?

When this question was asked of a group of people, a range of answers was given. It is clear that there is no single correct answer, because all the answers can be justified. Some answers given were:

- 0 birds are left (2 fall to the ground, the other 8 are scared and fly away, so none are left in the tree.)
- 2 birds are left (2 dead ones fall to the ground, the other 8 fly away)
- 10 birds are left (8 are alive and 2 are dead, but all are still birds)
- 8 birds are left (8 are left alive, and 2 are dead)

And each response could be linked to a particular perspective. For example, a birdwatcher might answer 0 birds, since no birds remain to be watched. A conservationist might say 8 birds, being more interested in live birds. A hunter would probably answer 2 birds, because s/he would be most interested in the two that were shot. And a farmer would say 10 as they still possess the 10 birds – some to take to market and others to use to raise further young. The answer evidently depends on one’s values, social position, outlook and interpretation – even though at first it seems to be merely a simple numeracy subtraction question!

Numeracy in Context: The reason for the variety of answers and interpretations given is because the question can be sited in many possible contexts. This suggests that numeracy cannot be seen separate from the context in which it is sited. It is always in a context. It is only in formal education that maths is claimed to be decontextualised and where we would have to answer 10 - 2 = 8 with no explicit context given. In fact, we
would claim that formal education is just as much a context as any other. In its case, it is the educational classroom with the values and social relations of the classroom. In every situation in which numeracy is used, it is found in a particular context with a particular purpose with particular values and social relations, whether it is a market or a bank or a tailor’s shop or the formal educational context of formal numeracy. And thus numeracy begins to reveal itself as a very potent contextualised social practice.

In addition, very quickly it becomes evident that numeracy is power-laden. Those with the particular numeracy skills from formal education are often in control of vital aspects of life such as banks, moneylending, shopkeeping etc. It is as though formal mathematics were a gatekeeper to such positions. People with weaker formal mathematics skills can end up feeling that they are the victims of cheating, whether by being cheated of change given, misweighed goods, or inaccurate wages. This is where social justice issues of numeracy become evident, and where the value of taking an ethnographic approach becomes clear as well.

1.3 Summary
Both literacy and numeracy, then, can be seen as social practices. There are of course other ways of looking at these activities, but we are asking here, what are the implications for teachers of adults of looking at literacy and numeracy as social practice? Will this help to make our work more effective and lasting?
2. WHAT DO WE MEAN BY … INFORMAL LEARNING?

*Everyday literacy and numeracy practices:* Looking at literacy and numeracy as social practices reveals that our literacy learners, even those who are officially ‘illiterate’, all engage in various literacy and numeracy practices in their daily lives. The question then arises – how did they learn these practices if they have not been taught formally? The answer lies in new understandings of ‘informal learning’.

Our understandings of ‘learning’ have undergone major changes in the last thirty or so years, in part owing to the spread of the concept of lifelong (and lifewide) learning and education (LLL/E) – and these new understandings have in particular affected how we view ‘adult learning and education’ (ALE¹). We need to explore these developments.

In the past, ‘learning’ has been associated almost exclusively with ‘teaching’ – whether that is formal (in educational establishments) or non-formal (outside educational establishments – i.e. taught programmes such as driving lessons or health clinics), or informal (e.g. instruction in the home, etc). That means that some people ‘learn’ a great deal (they participate in these taught activities) and some people can be said to have done ‘little or no learning’ (they do not participate in these learning activities). Some have even suggested that there are some adults who have done no ‘learning’ since they left school (despite some of them getting married and having children!).

*Informal learning:* But increasingly our understandings of a third kind of learning, ‘informal learning’, have grown. Informal learning is all the learning everyone does – even those who are not in formal or non-formal learning programmes – in the course of their everyday lives. Much of this learning is unconscious, or those who are learning do not think of it as ‘learning’. They may think of it as solving a problem, whether in the home, in the community or at work. Informal learning comes from daily contacts with other people – it is social learning. It is the way we all learn the changing culture in which we live – from conversations, from radio...

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¹ These are the preferred terms used by UNESCO
and television, from the newspapers, from public advertisements, from social media and our mobile phones, and so on. It is lifelong – it continues for everyone through the whole of life from the cradle to the grave; and it is lifewide – it takes place in every sphere of our lives. And through this informal learning, we all build up what have been called ‘funds of knowledge’ and banks of skills which we do not necessarily consciously know we possess but which we use every day whenever we make a decision2 (Moll et al 1992). These funds of knowledge and banks of skills are ‘tacit’, hidden from view, simply assumed and taken for granted – sometimes called ‘the knowledge we have but of which we cannot speak’ (Polanyi 1967).

Informal learning and literacy/numeracy: The importance for our study here of adult literacy and numeracy is that all people, even the so-called ‘illiterate’, have built up over many years their own knowledge of and skills in literacy, and especially numeracy, of which they are unaware; or they may know they have this knowledge and use these skills but they do not see this as ‘literacy’ or ‘numeracy’. For them, ‘literacy’ means reading a text, a book, and numeracy means doing ‘maths’; often these are associated with school, not what they are doing in the workplace (which may be designing and making furniture, marking out lines and numbers on a sheet of paper), at home (making a shopping list), in the market (reading prices and counting out change), in the community (responding to notices about local events) or in their religious life (using texts associated with their church, mosque, temple or synagogue etc). They have learned to do all of this by informal learning, watching and copying their neighbours, asking for help, or by trial and error, practising etc. Informal learning is a social form of learning from others.

A social practice approach to literacy and numeracy learning, then, does not start off by asking what the learners cannot do, what are their ‘needs’, or even asking what practices can they do, but rather it asks, what are they and their fellow community members already doing, - and the aim

of finding out such practices is in order to strengthen and build on these existing practices leading into new practices. It takes a positive view of the adult learners, not a negative view - they are already learning, even if unconsciously; and they are already engaging in some forms of literacy and numeracy.

3. WHAT DO WE MEAN BY … ETHNOGRAPHY?

The importance of ethnography for literacy and numeracy: If therefore we start by looking at literacy and numeracy as social practices rather than as universal skills, it means that we need to find out about the literacy and numeracy practices that already exist in the communities from which our literacy learners come. Our literacy and numeracy learners come to our classes with a great deal of experience of the literacy and numeracy in their daily lives, about much of which they are unconscious. They have learned this informally. The question then is, how do those who teach adults find out about these local literacy and numeracy and learning practices? It is important that we do so, for adult education ‘starts where the learners are’, it builds on their experience. Like all forms of growth, all new learning must build on prior learning. One answer to this question is that ethnography is a very useful tool to help with this task (see Purcell-Gates 2004; Barton 2013)

What is an ethnographic approach? Ethnography is a process of studying subjects (in this case everyday literacies and numeracies) through detailed examinations of individual case studies. And it does this from the point of view of the participants, in contrast with dominant approaches to literacy and numeracy that tend to begin with the outsider’s view of what counts. The ethnographer looks at what is going on and tries to see it from the point of view of the person(s) being researched.

Some ethnographers have used the story of the turtle and the fish to illustrate what ethnography is.
There was once a turtle who lived in a lake with a group of fish. One day the turtle went for a walk on dry land. He was away from the lake for a few weeks. When he returned, he met some of the fish. The fish asked him, “Mister turtle, hello! How are you? We have not seen you for a few weeks. Where have you been?” The turtle said, “I was up on the land, I have been spending some time on dry land.”

The fish were a little puzzled and they said, “Up on dry land? What are you talking about? What is this dry land? Is it wet?” The turtle said, “No, it is not.” “Is it cool and refreshing?” “No, it is not.” “Does it have waves and ripples?” “No, it does not have waves and ripples.” “Can you swim in it?” “No, you can’t.” So the fish said, “It is not wet, it is not cool, there are no waves, you can’t swim in it. So this dry land of yours must be completely non-existent, just an imaginary thing, nothing real at all.” The turtle said, “That may well be so,” and he left the fish and went for another walk on dry land.

See http://www.beyondthenet.net/dhamma/nibbanaTurtle.htm

Ethnographic research is like the turtle going to see what is happening in another context. It is based on the assumption that there is something to study, to explore and discover; it does not (repeat not) set out to discover ‘needs’, what is missing, the deficits, for these are based on the norms of the outsider. It sets out to discover what is going on. The turtle did not go to dry land to find out what was wrong, to teach, to change things, put things right, but simply to try to discover what is going on and interpret it in his own light – and then to explain this to others (the fish) in his original context.

Why should we do ethnographic-style research? There are many reasons for using an ethnographic approach, but the main one is that the existing approaches to discovering about the literacy and numeracy experiences of the literacy learners appear to be inadequate. Just to ask the participants directly what are their literacy and numeracy practices has four main problems:

a. First, we are asking them about things which are important to us, not what is important to them; they may never have thought about them before we ask.
b. Secondly, they will often echo back to us what they have learned from
us or from others. They will tend to say what they think we expect
them to say; this is called a process of ‘internalisation’, where people
have come to believe what others have told them to believe.

c. Thirdly, they will often define what they are doing as not the thing we
are asking about, for example, that some forms of writing and written
or non-written calculations or record keeping are not ‘literacy’ or
‘numeracy’ – that writing a shopping list or reading a note from school
about their children is not ‘literacy’. Literacy for them is reading a
book in a way taught in school. Equally, they may feel that counting
change in the market or when paying for a taxi is not ‘numeracy’.

d. And fourthly, many of the activities they [and we] do are tacit, are
done unconsciously (see note above on informal learning).

So if we were simply to ask them about their ‘literacy’ or ‘numeracy’
practices, they may give us answers which they believe to be true but
which omit much from the experience that is relevant. We need to go
deeper than just asking the literacy learners about their ‘literacy’ and
‘numeracy’, and accepting their spoken evidence. We must supplement
our enquiries with other means of finding out what is going on – and that
is ethnography.

We need to be clear that, in LETTER, we are not proposing that a full
ethnography of literacy and numeracy should be completed - for a full
ethnography takes a long time and goes into much greater detail than is
possible in our context. We are proposing instead that we should conduct
‘an ethnographic-style approach’, using ethnographic tools - adopting
what is called an ‘ethnographic perspective’ (Green and Bloome 1997).

*How do we go about an ethnographic approach study?* The tools of
ethnographic research are much the same as those of other research. They
include

- **Reading** documents (previous studies, planning papers, evaluations
  and the like)

- **Asking** questions and discussing with the researched people
  individually or in groups – extended interviews and focus group
discussions.
But to these we add **observation** – as someone in one of our workshops said, ‘just hanging about’ to see what is happening and to interpret it. It is important to stress this, for an ethnographic approach does not look for what is missing but what is being done at the moment as a starting point for developing new activities/practices.

There are three things which are distinctive about an ethnographic approach

a. It goes into a deep study of an individual or small group, of a place or an event – a case study; it is often called ‘a thick description’ (Geertz 1973).

b. It tries to interpret the practices it sees from the point of the user of those practices – what does it mean to them?

c. And it adopts a critical approach to these case studies. It asks, What power relations can be seen?

In the case studies undertaken by the participants in the LETTER Uganda programme printed below, the following tools were used:

- **Small case study** – each participant took a single case study, not by sampling but random or convenience-based; some even took what has been called a ‘snatch case study’, an unplanned opportunity which simply occurred at a moment in time. Each case study will tell us something. Each one asks, what does this case tell us? They were not seeking grand generalisations but real life lessons to be learned. They are all primarily qualitative, not quantitative. Ethical protocols were observed in every case study.

- **Observation**, including taking photographs wherever possible (again protocols of obtaining permission were observed).

- **Engagement over time** as much as possible. We were all conscious that these case studies are not a full ethnography, for that would take a very long time; but all of them are using ethnographic approaches.

- **Other research elements**: questions; discussions; focus groups discussions.

- **Documentary searches**
Ethnographic approaches to informal learning: In LETTER, we use ethnographic approaches to learn about the everyday literacy and numeracy practices of our learners in their own contexts and the literacy and numeracy practices of the communities they come from - not only to uncover what is often hidden even from those who use such practices, but to go into greater depth, to explore what these practices mean and how they are used in terms of social relations and power. And we can also use ethnographic approaches to discover the informal ways in which these people learned - ways of learning which they do not see for themselves - by listening, watching and imitating others, by practice, by trial and error, by creative thinking. An ethnographic approach to research is thus making the invisible visible.

‘Ethnographic tools’ or ‘an ethnographic approach’? In our workshops, we became aware that some people see ethnography as a set of tools to be used in all kinds of surveys (including needs surveys). This is not what we are talking about. For an ethnographic-style approach goes much further than just using some ethnographic tools. It means adopting an ethnographic perspective, a de-centring, removing power from the researcher, the teacher and the literacy agency, and encouraging the literacy learners to use the power they possess (but which they may deny they have). Just like the turtle, the teacher for a time becomes the learner, the learner becomes the teacher. It is a complete change of perspective - trying (never fully successfully) to see the world as the researched see it, through their eyes; and teaching based on an ethnographic approach becomes an attempt to help the participant-learners to build on what they now can see and to grow, to develop into new knowledge, skills and practices.

Reflexivity: Thus it is important to realise that adopting an ethnographic-perspective requires us to explore also ourselves, ‘our’ beliefs, values and assumptions, not just ‘theirs’. This is what anthropologists refer to as ‘reflexivity’, although a key issue in our approach is that we are not trying to make the adult literacy and numeracy facilitators into ‘anthropologists’, just helping them to make use of ethnographic perspectives (cf Street 2012). The turtle learned a great deal about him/herself – even the fish learned something about themselves.
CONCLUSION

LETTER brings together these three fields of study. We start by asking, what will be the effect on our work as adult educators and trainers of literacy and numeracy facilitators if we see literacy and numeracy as social practices rather than as universal skills? Secondly, we discuss how new understandings of informal learning reveal how our adult learners bring with them to our classes their own funds of knowledge and banks of skills they have each built up, often unconsciously, over many years from their daily life experiences – tacit knowledge and skills which will form the basis of the new knowledge and skills they will develop through our classes. Thirdly, we ask, how can we find out about the local literacy and numeracy practices in the communities from which our learners come and the different ways these have been learned informally through experience? Thus we discuss how ethnographic approaches can help adult literacy facilitators and their learners to investigate their own literacy and numeracy learning practices, including the literacy and numeracy practices of the facilitators themselves (see Rogers and Street 2012).

![Diagram: LSP-NSP
Informal learning
Ethnography
LSP-NSP]

After these introductory sessions in the first workshop, the participants were sent out individually or in small groups to try out for themselves if these approaches were of value for understanding literacy and numeracy in the local context of the workshop. And at the end of this workshop, each of them agreed – after discussion with the resource persons – to explore
some aspect of local literacy and numeracy in their home context, using ethnographic approaches and an understanding of informal learning. The result of some of these local case studies is presented in the next section.

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PART II: CASE STUDIES OF LITERACY AND NUMERACY PRACTICES IN DIFFERENT CONTEXTS IN UGANDA

What follows in this Part of this book are a number of case studies of local literacy and numeracy practices researched and written up by participants in the Uganda LETTER training programme. During the first workshop in April 2010, all the participants undertook a short field study visit in Kalangala Island, looking at everyday literacy practices. They then identified a possible research project to undertake when they returned to their homes and workplaces, and discussed these potential projects with colleagues and the resource persons. During the second workshop, they presented their findings to the whole group and between that workshop and the third workshop, they refined and wrote up their projects.

The reports presented here vary very much and these variations have been left to speak for themselves. They have been edited only in terms of their presentation, not their contents. They are given here as examples of the kind of small-scale research projects using ethnographic approaches, which adult literacy and numeracy facilitators and their trainers can undertake with their literacy and numeracy learners.

A commentary on the findings and the application of these case studies is presented in Part III of this book.

In what follows, the words spoken by the respondents (which have been translated from their local language) are in italics. All photos unless otherwise indicated, were taken by the author(s) of the case study.
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1. THE LITERACY AND NUMERACY PRACTICES OF A CARPENTER
Stella Achen and Dave Baker

During the first LETTER workshop that took place in Kalangala district in Uganda in April 2010, we were asked to do some fieldwork and practise the ethnographic and social practice approaches we had learnt about. We were in a group of people and went to Bumangi village. We were welcomed by the people there and we greeted them in the local language (Luganda). They were happy to see us because we had arrived with some white people in our group. This attracted them and they were very willing to speak to us.

Peter (not his real name) is a carpenter in this village. We greeted him and were moving on down the road when he asked us what we were looking for and said he could help us. We then went over to his carpentry workshop which was just next to where he was standing. Stella asked him if we could enter his workshop. He agreed and led us into it. He then began telling us about his workshop and what he does. Peter was enthusiastic about the interview with him. We returned to follow up ideas and talk with the carpenter, Peter, on one other occasion.

Peter is aged forty-six years and learnt the carpentry skills from his elder brother who learnt the skills from his father. He is teaching these skills to his son who is aged 10 years and also to his older nephew who had lost his own father. Peter teaches his son over the weekends and sometimes after school, unlike his nephew who comes when he can and learns as he works. The son said he was not interested in being a carpenter and that he wanted to be a driver when he grows up. Peter said that he would not be happy to die, as all his skills would be lost since his son does not seem that interested in carpentry. He said that if he had a bigger workshop, he could teach others to be carpenters, ensuring that he could pass on his skills.

Peter operates both a carpentry workshop and a retail shop together with his wife. They own the land where these premises are located, which he says were passed on to him by his late father. He pays the local tax that is levied upon his business by the town council in Kalangala. This tax he says is paid annually.
When we entered Peter’s workshop, we were fascinated by the quality of his carpentry work as shown in the sideboard that he had made (see photo below). We congratulated him upon this piece of work. When he saw our interest in this piece of work, he directed us to his living room where his wife and his three-months-old son were, to see a completed sideboard. His wife was happy to receive Stella in their living room and permitted her to take a photograph of the sideboard. Stella asked her if she could hold her baby which she gladly accepted and gave him to Stella. They chatted a little, but they were being interrupted by customers as they kept on coming to buy goods. Stella eventually left her and went back to her colleagues who were with Peter in the workshop.

Peter said that when he was in primary class two, he was withdrawn from school because his family lacked the money to pay his school fees. When he was an adult, Peter joined the Functional Adult Literacy (FAL) classes but withdrew because the FAL classes were conducted in the local language (Luganda). This disappointed him because he had wanted the classes to be conducted in the English language where he could learn to read and write in English. Peter says that he is literate\(^1\) in the Luganda language but says that he feels he is illiterate as he cannot read and write in English. He says the whole world knows he is illiterate. He told us that in the past he tried to tender for carpentry work and was turned down because he could not present his ideas and tender in English. During the subsequent follow-up visit, he said that he now feels that he should try to attend a FAL course in Luganda. No such course exists at the moment in his village.

He writes down in Luganda the carpentry items he needs from the shop and sends his wife to purchase them. His wife was schooled to primary six and then withdrew. She too acknowledges that she can read and write in Luganda and (unlike her husband) a little in English. She says she keeps proper records especially of the retail shop business and says no one can cheat her in this business. They live on the money they get from these businesses. They have four children and they send their children to school and use the money for that purpose. Peter also looks after the four children of his brother who died. This makes them unable to bank any money though they would be very willing to bank their money. He helps

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\(^1\) He did not tell how he learned to read and write if he left school in class two and withdrew from the FAL class
his children with their school work in Luganda, whilst his wife helps them with their English.

His workshop has no electricity and is made out of planks of wood roughly joined together. He can only work in the daylight. It contains a workbench, carpentry tools and timber. The tools he uses in his workshop include the plane, tape measure, set square, sharpening stone, sharpening file, and saws. He showed us how he sharpens his saws. Each tooth of each saw is sharpened individually with a file. The angle of the teeth is crucial. He judges this by eye. He reads his tape measure in inches. His work is marked by accuracy and this is clearly seen from the products that he makes. His carpentry geometry is well developed and effective as shown by the quality of the wooden curves he makes on his pieces of furniture. These are remarkably good, especially when compared with the limited tools that he uses. He has no power tools. He also showed us how he makes mitre joints which have to be exactly at 45 degrees. He seems to do this visually, drawing on his extensive practical experience. He also said that he looks after the wood he purchases to season it.

He told us that he designs his own furniture such as the sideboard. Customers also give him orders for pieces of furniture; he then designs them, drawing on his own ideas and experience. Having designed an item, he makes it, using a full range of carpentry and mathematical skills and techniques as discussed below. Peter says he has mastered his work and therefore some of his measures are mere estimates. The carpentry products, especially the sideboard, should sell for about Ug. shs 350,000/= in Kalangala and about Ug. shs 600,000/= in the capital city (Kampala). He says that he does not have the money to market or advertise his goods. He mainly sells to local people who know about his workshop. He has had requests from passersby for large pieces of furniture. Few of these seem to have been turned into actual sales. He uses a hard wood grown on the island. The wood comes from a mukusu tree. The wood for two planks, 7 feet by 1 inch by about 6 inches, costs him Ug. shs 7500/=, not taking account of his labour time. The trees are cut up into planks by hand, using a 7 feet long double-handled saw with one person at each end. The saw is used vertically with a tree lying horizontally on a bench. He stores the wood vertically to ensure it dries quickly and properly and does not warp.
Analysis

It seems clear to us that in his work as a carpenter, Peter uses the numeracy skills, techniques and practices he has learnt whilst making furniture. There is little evidence that he draws on the formal numeracy practices he learnt in school. The skills he uses in his work go well beyond those he might have been taught in his limited primary school and FAL participation; he said that they have been learned from his older brother and from his experience. In his carpentry, the numeracy practices he engages in include aspects of design, construction and measurement, and also his business activities include the purchasing of materials and selling his furniture. He can measure lengths and angles with appropriate accuracy, either using tape measure or his own techniques. He understands ideas about the strengths of materials and especially aesthetics - he knows what designs will be seen to be attractive to his customers. He understands the materials he uses and is aware of the shapes he can make with those materials. He can estimate lengths, angles, time and money. He knows how different shapes can be fitted together to get the designs he wants. He can plan his own activities to ensure he can make enough profit to handle his family’s economic needs. His carpentry numeracy practices are therefore wide ranging and are framed by his own values in terms of the quality, aesthetics, strengths and the longevity of his furniture. However, the areas he identified himself as lacking skills is in being able to record his activities in writing and to produce documents in English that would enable him to tender for larger-scale furniture building contracts with local authorities or larger businesses. He would therefore like to attend classes where he would be able to learn how to write such documents in English and include in them his designs and costings.

Implications

This case study has implications for adult numeracy and literacy classes (e.g. FAL). Peter has a wide range of existing numeracy skills and practices and he has some literacy skills and (through his wife) access to a wider range of literacy skills. He would also be very clear about what he would want to gain from such classes. His teachers would need to fit in with his skills and needs. Not to do so would probably mean that he would withdraw from such a programme as he did before. To fit with this position, his teachers would need to know what his current practices are and build
on them, which is the approach being developed by the LETTER project as described in this book.

Peter in his workshop

His own designed and made sideboard
2. THE LITERACY PRACTICES OF TWO ROADSIDE MARKET WOMEN SELLERS

Majanja Zaaliembikke

Purpose
To try and understand how some people use literacy and numeracy in their daily lives in their semi-rural roadside markets and how they acquired those literacy and numeracy skills.

Background: my learning journey
During the month of April 2010, Makerere University, Institute of Adult and Continuing Education (IACE), in collaboration with a number of other institutions, conducted training in ethnographic research approaches to literacy and numeracy in Kalangala. Some field work was done during the training, and the participants were asked to identify a research topic for their respective areas and conduct a deeper research study using ethnographic approaches so as to be more grounded and to practise the skills and knowledge imparted during the training.

I chose to conduct my study on two semi-rural roadside markets (stalls) because most of the operators are not literate or are semi-literate, but yet some of them succeed to a certain extent. So I wanted to learn the practices of literacy and numeracy they use, how they use them and how they acquired them - to find out the practices whose meaning is not very obvious, and then attach a meaning to what I found from the study. For me, this was a learning journey to enhance my knowledge and experience in adult literacy education by exposing me to different ways and practices of literacy and numeracy teaching. It would also help me understand further everyday literacy and numeracy practices.

Guiding questions/things to watch out for
• How were these markets set up?
• Who runs/operates them?
• What kinds of literacy and numeracy practices are in the market?
• How did they acquire/learn them?
• How much do they know?
• How frequently do they use their literacy and numeracy skills?
• Do they have any systems in terms of buying and selling?
• What is happening out there?

**Concepts**
Measurements/weights, numeracy, literacy, benefits, calculation of profits, profit margins, customer care, types of customer services, time, selling techniques, purchasing, stock, credit, and record keeping

**Methods used during the research**
Some of the methods that I used include observation, informal conversations, partial participation as a buyer, and questioning.

The findings have been categorised into
a. General overview of the semi-rural roadside markets (how these markets were set up, who operates them)
b. Activities within the markets (systems in stocking, setting of prices, selling and buying)
c. Uses of literacy and numeracy in the market and the frequency (what do they know? How did they acquire what they knew, how are they using their skills and knowledge)?
d. What lessons can be learnt from the study?

**General overview of the roadside markets**
These semi-rural roadside markets in Kampala area are located along the Hoima road towards Wakiso Town Council which also houses the headquarters of Wakiso District. They are not very large markets although they serve the people in that particular area - it is where they buy most of their foodstuffs, vegetables and fruits. Basically, these markets are for the local community. The community are happy with these semi-rural roadside markets since they are very near their place of residence. So they do not have to go for their food supplies and groceries to the bigger market that is about four kilometres away.

These markets are run by different individuals who are residents of the same communities. However, these areas are semi-rural, so most people have their own food and vegetable gardens, although these are not big enough to supply all the family food needs. Of course there are some people who do not have gardens, especially those who rent houses.
I studied two semi-rural roadside market stalls which are owned by different people, and they are located in different places in the same community with some distance between them. The two roadside stalls studied have been there for quite sometime, over six years. The people who are running these markets have different types of literacy and numeracy at different levels.

**Market one**
This market is being run by a family, Salongo and Nalongo Kaggwa (in Buganda culture, Salongo and Nalongo are the titles given to a couple who have given birth to twins). The Kaggwa’s are always in the market. Their two children join them during the weekends and when they are not at school, they come to the market to give a hand to their parents. When the children are there, one of the parents stays with them or sometimes they work on their own without their parents. The girl is 16 years old, and in senior four class (11th year of education in Uganda) and the boy is 17 years old in senior five class (12 year of education in Uganda).

These stalls sell different types of food stuffs like fruits and vegetables. This particular roadside market (Market 1) sells matooke (green bananas) in both bunches and heaps (*myeera*), Irish potatoes, sweet potatoes, pumpkins and different types of yams. They sell fruits such as pineapples, oranges, sweet bananas, passion fruits, lemons and mangoes; and vegetables such as cabbages, spinach, egg plants, bitter tomatoes, carrots, onions, *Bugga* (yam), avocados, French beans and *Nakati* (an African green vegetable), as well as silverfish.

The wife normally goes far off in the villages to buy foodstuffs and vegetables supplies at fairly cheaper (farm gates) prices. She travels on lorries that carry traders to remote rural farm markets and she brings back a lot of foodstuffs and vegetables. She sells them wholesale to other food retailers but retains some stock which she sells in their market.

She said that at times she records, although not consistently, because recording makes her tired. She commented that *the recording is for those people who are not self employed because they have to account to their bosses. For me, I know my items very well. But I tell my children to record, if I know that the whole weekend I and my husband will not come at all to the market.*
She said that, when she is making her profit margin, she includes the cost of transport and that of loading and off-loading because it is an expense. The only advantage of going to the villages is that you choose the quality you want out of plenty, and bargain. At times when we buy from the supplier, you have no alternative choices, so you end up buying what the supplier has and at high prices, yet it might not be the best quality.

Measurements
They use heaps, plastic plates/cups, tinny basins and five litre Jerri cans as measurements for what they sell. For example, this market vendor sells silverfish using a plastic cup. Each plastic cup she sells at Ug. shs 350/= . They use the plastic plates to sell bitter tomatoes, kikiga potatoes, tomatoes and egg plants. Then the small plastic basins and five litre Jerri cans (cut into ¾) are used to sell Irish potatoes. The matooke is sold as a bunch or cluster as well as measured in heaps. Sweet potatoes and cassava are sold in heaps.

When I inquired how she determines that this heap is enough, she said that she can tell by looking. During the low season, she usually puts about ten to twelve fingers (minwe) in a heap which she sells at Ug. shs 1000/=, or she puts twenty to twenty four in a heap which she sells at Ug. shs 2000/= . At times, she sells three fingers for Ug. shs 200/= . The same goes for sweet potatoes and cassava, but because these are larger, she puts much less but still uses visual assessment of the quantity in each heap, depending on how big the tubers are.

These traders do not use kilos. They have created their own means of measuring, and their customers are more familiar with their system of measuring and determining the quantity for sale. They learnt these practices from other traders who are in the same trade - with the exception of the silverfish; the use of the plastic cup to sell silverfish was introduced by the husband when he got tired of handling the silverfish with his bare hands because, even if he washes his hands, the fish stain would not go away easily and yet he had to serve other customers. One day when his wife was not around to support him, some impatient customers started complaining that he is slow, he is not as fast as his wife, he is wasting a lot of their time as he kept on washing his hands. He said, “Nenyiiga nga ndaba ba kasitoma bansumbuwa ate nga mba nkyanaaba mu ngalo”, meaning, I
got annoyed because my customers were often complaining that I am slow, yet I was trying to clean my hands so that they do not smell of silverfish as I serve them. “Kati olwo nengiya ekikopo, omukyala wange yagenda okuddanga ekikopo ekisena amazzi kisena mukene. Nayomba naye oluvanyuma nabivaako, naye natandiika kukikozesa” - I decided to use the plastic cup which we were using to draw water and converted it to measure silverfish. When my wife came back, she complained bitterly, but then later on she gave up because she is even using it and appreciating the idea.

The husband charges slightly higher prices when working alone compared to when working with the wife or when she is alone. The husband is not willing to reduce even Ug. shs 100/=, yet the wife at times will reduce if a customer asks for a bargain. When I spoke to the husband, he said that most of the time his wife sets the prices because she is the one who goes to buy the food supplies from far off village markets and farms to sell in their market. He said he feels better when he is selling when his wife is also around. I asked him to explain, and he said, Don’t you know that the life of two married people is more pleasant when you are together than when you are alone?

One day, I found their daughter and at that particular moment there were no customers. So I started by asking for the different prices of vegetables and fruits. She told me it is her parents who set the prices, so she cannot reduce for me. The parents will not be happy, and after all this is where the school fees for them is coming from. She said, I prefer to stay home and read my books so that I can score high marks, instead of selling at this stall. She seemed a person who was not very patient with many questions; and then customers started flowing in and I stopped my informal conversation.
The wife is a member of a local NAADS (National Agricultural Advisory Services) group and she is a member of BRAC, which is a micro-credit organisation. So at times she borrows money but not very often, only when they get stuck.

The wife of Salongo, who learnt how to read and write when in primary school, keeps some records although not very consistently but she says that they are adequate to give her guidance for planning purposes and also purchasing more stock.

Market two
The second semi-rural roadside market stall is run by a widow (Maama Cathy). For me, I never went far in schooling because my father died and nobody was able to pay school fees for me. She said that she started that roadside market so that she can support her three children, two girls and one boy. She deals in foodstuffs and vegetables plus some few fruits, specifically pineapples. For foodstuffs, she sells Irish potatoes, matooke and sweet potatoes. For vegetables, she sells spinach, nakati, eggplant, cabbages, tomatoes, carrots, onions and bitter tomatoes. She buys her foodstuffs and vegetables from different suppliers.

She said that she takes into account the quality and purchasing prices of the foodstuffs and vegetables because she has to sell them. She said that if she purchases at a high price, that means that her profit will be very minimal or if she puts a high mark-up when she wants big profits, then the foodstuffs do not move fast because the prices are high.

She said that she was worried and unhappy because her daughter in primary school class seven declared that she is no longer interested in schooling. The reason she gave was that whenever the teacher was in class teaching, she (the daughter) was not grasping anything and so when it came to do exams she was not performing well. She felt that she was wasting her mother’s money. Her mother stated that despite all my efforts to work and to encourage my daughter, the girl has refused. “Nsubiddwa omuwala owa diguli, nange bandigambye nti muwala wa namwandu afunye diguli okuva e Makerere, awo nga nange nzimba”, meaning that I have missed a degree graduate. [If she stayed at school], people would say that the daughter of a widow has got a degree from Makerere, and then I would be very proud.
The girl has been taken to one of the nearby hair salons so that she can learn how to tie and treat hair and other salon activities. She can either be employed in the salon or if there is some money, she can start a salon of her own in future.

One time, I went to this second market and found that the mother had gone for a funeral service and burial of a relative, so I found her daughter selling. Through our informal but directed conversation, she said that once in a while when her mother has such functions to attend to, she (the girl) comes and sells. When I asked her if she records what she sells, she said she does not. Then I inquired how she knows how much she has sold. She replied “ate nze ebyokuwandika tebinyanguyira nnyo, binkooya”, meaning that writing is not easy for me, it makes me tired. However, she reported that her mother leaves her with a certain amount of money in the till box to use when she is giving back change to customers. When her mother is not around, she leaves the market about six thirty to go home because she fears to sell late at night; people might bring fake notes to her, she said she cannot detect them especially at night. She said that when she gets home, she counts all the money she has sold, then she subtracts the money her mother left in the till box and that makes her know how much she has sold.

**What she practises**

The mother said she does not record often but when she gets some foodstuffs on credit, she writes down how much she owes to the supplier; likewise when she gives credit, she notes it down in an exercise book. She uses one of the school exercise books of her daughter that was still unused, since her daughter had decided to drop out of school. She admits that it is not easy for her to pinpoint how much profit she gets from each item or from the categories of items, such as foodstuffs, vegetables and fruits. She said that she knows how much she buys and when she makes her mark-up and sells all the foodstuffs and vegetables, then she knows she has made a profit. When asked why she does not record consistently, she said it is cumbersome, she cannot find time. “ate era sikikulu nnyo, mba mbimanyi mumutwe”: it is not very important to record. Moreover I know them in my head. That really means that recording is a low priority for her – other things are more important. She normally records if she feels she might forget but it is not a priority for her to record all transactions.
However, she counts the heaps she sells daily, and apart from Sunday she normally sells an average of ten to twelve heaps daily. She said that Sunday is when she sells best because most people are at home, so they keep on sending their children or coming by themselves to buy food and vegetables, even those she gives credit to during the week, which is when they pay off. Her sales also are high on Saturdays, especially in the evening.

She said that she gives credit to customers who are regular and buy a lot of foodstuffs, vegetables and fruits. She said that she trusts people who have been her customers for a long time and whom she knows where they reside, their homes. “Bwalwawo okusasula nsobola okugenda ekka nemubanja” meaning that, if she gives a customer credit and she/he delays to pay her, she will go to the customer’s home to demand her money. That is why she gives credit to those she knows where their homes are.

She buys *matooke* in sacks and sells them in heaps. So she makes heaps of Ug. shs 500/= and 1000/=. But she also sells three bananas at Ug. shs 200/=. For Irish potatoes, she buys in tins; she said that she cannot afford to buy a whole sack of Irish potatoes because it is very expensive. People also do not buy them as fast as *matooke*. If she buys a full sack, it means she will not be able to buy other items. She sells them in small plastic plates/basins or the five litre Jerri cans cut off from the top to make them a bit shorter, so she puts in less potatoes. She normally purchases when the items are about to get finished, so that she does not run out of stock.
Credit organisations
This woman is also a member of two different credit organisations. One is BRAC (she does not know the meaning of the abbreviated letters). They meet once every week. The meeting place is within one hundred and fifty metres from her market stall. She is also a member of a Divine credit organisation, which is a church-founded organisation. She borrows money from each of these two organisations but at different times. If she borrows from BRAC in January 2011, then she will not borrow from Divine for the next four months until she has cleared the loan from BRAC. I asked her why, and she said, “étama oteekamu kyonosobola okugaya” meaning that you bite what you can chew.

Record keeping
According to her, she now records almost all her purchases and sales unlike in the past years. This was after joining the micro-credit organisations where the members are taught how to do basic recordings before they can access loans and they are being monitored by the loan supervisors. She now appreciates the importance of recording.

Some lessons learnt:
Their literacy and numeracy practices
The respondents running market one reported that they never went very far in formal education, both of them stopped before reaching primary class seven but they can write legibly because they have been practising as they record some of the things they buy, although they don’t do it systematically. They consider themselves as not well read: ”Ffe tetwasoma
“kugenda wala nnyo, tetuli bayivu”: for us we never went far, so we are not among those who are considered as well educated/read.

They are using literacy and numeracy practices that fit their situation best and which are sufficient for the type of activities they are engaged in as they perceive it. The wife (Nalongo Kaggwa) said that she had an elder brother who would make her practise writing even after she had left school. For the husband, it was difficult for me to get the information in that regard.

Languages and scripts
These roadside market vendors use the Luganda language for most of the time. However, occasionally they speak some imperfect Swahili when dealing with customers who are not able to speak Luganda. The Swahili is used rarely because most of the residents know Luganda, but for example, some Sudanese who are renting some rooms around do not know the Luganda language. They speak a few words of English - I heard, ‘thank you, no, yes, ok, good’. Most of their reading and writing are done in Luganda language using the English/Roman scripts.

Different literacies
These market vendors have different literacies. The first semi-rural roadside market, the owners are Muslims. The husband knows some few words in Arabic. The second market, the owner is a Catholic but not a staunch one, and she is a widow looking after three children (2 girls and 1 boy). She said she goes to the eklezia (church) once in a while, not every Sunday, for, as she said on Sundays I also sell, in fact more people buy on
Sundays. She said that she makes highest sales on Sundays, Saturdays and at times on Fridays. “Ate bwobasubwa ku Sunday nga tebasasudde wiki egwaako”, meaning that if you miss them to pay you on Sunday, then you might spend another week before they are able to pay off your credit. This shows that they also engage in church-related literacy practices, the reading and writing that supports their participation in church activities and functions.

School and learning how to read and write
These market vendors have developed further the little reading and writing they learnt from formal schools as they practised the literacy required for roadside market vending. They strongly believe that every person must go to school and sit in a classroom with a teacher if they are to learn how to read and write and pass their exams before moving to the next class. They are aware that this must continue until you understand that which you want to learn. They also believe that the reading and writing learnt from school was specifically meant for those who are to work in offices. “Okusoma ennyo kuyamba bagala kukola mirimu gya mu office kusiba tie”, education only benefits those who want to work in an office for white collar jobs, office work.

Functionality
The different uses of the reading and writing skills I observed in these two rural roadside markets had their different functionalities in one way or another. These literacies are learnt and used within the context of the market and its customers. They are also used within the context of the community in which these markets are situated. Therefore, these local literacies facilitate social communications and interactions as well as enhancing community relationships.

The position of literacy and identity
Nonetheless, much as the vendors at the roadside markets stated that formal schooling is basically for those people seeking for white collar jobs, they also added that the formal schooling makes you become recognised wherever you are. “Abantu bakwogerako nga eyasoma era bakwebuzaako ebintu bingi okusinga oyo atasoma”: if you learn how to read and write from school, many people in the community recognise and refer to you as one who has gone to school and they normally consult you on many different issues.
The type of literacy that seems to count

Thus these market vendors recognise the value of learning how to read and write from school; and they said that

while for us we never saw enough blackboard, we want our children to see it and in detail. That is why we are working day and night to ensure that we get school fees for our children, so that they go to school and even get degrees from Makerere University. For us, we scribble some of the things we buy and at times those we sell, but that ends in our market just to remind us and even trace some of the people we have extended credit facilities to. Nobody in the community counts you among the people who went to school! We do not want our children to be in the same situation.

And as we have seen, the second market vendor (the widow) was worried and unhappy because her primary seven daughter decided to leave school. To these market vendors, the reading and writing that counts is the one you learn from school and not those you learn outside the school context. They seem not to recognise and appreciate that they are using literacy and numeracy in their daily activities, even if they learnt it from outside of school.

I bought various items at different times. In market one, that is the one that belongs to a wife and her husband, the wife is very fast with her mental work in giving back the right change. The husband is fairly slow but will give the correct change in the end. It is difficult to say if they are saving some of the money they earn from the roadside market sales. What
EXPLORING LITERACY AND NUMERACY PRACTICES

is clear is that this is the source of money from which they are paying school fees for their seven children. It is also put back into the business by restocking their market as well as meeting their family welfare expenses. I noticed that both the husband and the wife keep the money from their sales in different places in their roadside market.

In the second market managed by the widow, she gives you back the correct change after some slow mental calculations; she does not write it down but counts the money twice or even thrice if you give her a big note. She said that she has a small wooden saving box where she saves some of her money after every two or three days. But she hastened to add that she sometimes fails to throw in money in that wooden box in the way she would like to because she does not have enough capital. When I asked how long she has been doing this, she said that she started doing that only two months ago and she does not know how much is in the box as yet. She said she wants to open that wooden box on 1st December next to see how much she has saved since she started at the end of April. This was not as she had planned to start in January.

**Informal and standardised literacies and numeracies**
In my case, I take the type of literacies and numeracies used by these semi-rural roadside market vendors to be informal literacies and numeracies learnt informally out of school. Then I take the school literacies to be the standardised ones. The family in market one have a way of using literacy and numeracy little, as most of the recording is done by their children but the wife also does some simple recordings, especially credit given to customers, which they are able to follow up and interpret for their own use as and when needed. An interesting point I found is that the parents do not allow their children to give out goods on credit. It is only the parents who give credit. Much as the standardised literacies often disregard the informal literacies, it is a fact that the informal gets a lot from the schooled literacies in terms of perceptions.

**Conclusion**
I was interested to learn how these semi-rural roadside market vendors sustained their business using the skills of reading and writing and to understand from an ethnographic perspective how these people use the literacy and numeracy they have acquired to enhance their operations.
I reflected on the way each of these market vendors was using literacy and numeracy in the context of their market vending operations and realised that their use of reading and writing fitted well with their everyday livelihoods activities. The environment they operate in helps them to learn how to read and write informally as they did their everyday selling and buying. They reported that they learned through family members, older brothers and younger children, other stall holders and from friends; they also learnt through listening to some radio programmes and informal conversations, and their activity-based practices were one of the main sources of their learning.

They have achieved several things, but to sum it up, they have sustained their semi-rural roadside markets for many years and earned their livelihoods and maintained their families with the income from those roadside markets; they have accumulated rich experiences that include the use of reading and writing in sustaining their livelihoods.

This ethnographic approach to understanding literacy use in everyday life has helped me to overcome some assumptions about people who are not very literate, and to realise that there is need to put on an ethnographic lens to analyse literacy and numeracy use in everyday life in different contexts of people's everyday life.
3. THE LITERACY AND NUMERACY PRACTICES OF NAKIRU ROSE OF AKWIAMU VILLAGE IN KARAMOJA, UGANDA

Leah Hopp

Introduction
In May 2010, my language helper and I walked to Akwiam, a neighbouring village in southern Karamoja, to visit a lady commonly known as Nakiru Rose whom we had met at a malnutrition clinic the week before. I decided to visit her because I had noticed that she was the only mother at the clinic who had washed her and her malnourished child’s hands before giving him a nutritional supplement. The purpose of visiting her was to inquire into her numeracy and literacy practices and to begin to understand her uses of numeracy. We asked for permission to visit her home and she welcomed us. I spoke in English and she spoke in Ngakarimojong while my language helper interpreted both the questions and the answers to facilitate greater understanding and ease of communication between us.

Nakiru was approximately thirty years old and the mother of five children. At the time of speaking with her the first time, she was pregnant and living with her mother and her youngest child in Akwiam. She and her husband cultivated a small farm ten kilometres away on the part of Mount Kadam referred to as Kaiku, behind Amaler, just outside of Namalu town. Her husband and other children who lived in Kaiku have since moved to Akwiam to join her. The reason she stated for living in Akwiam with her mother is that she does so in the dry season and returns to Kaiku to work in her field during the rainy season (March-November). This answer was surprising because it was then the rainy season when we spoke to her in Akwiam. She also mentioned that her youngest child is malnourished and she wanted to bring him to the malnutrition programme in our community.

An account of Nakiru’s numeracy practices observed during the study
One area of numeracy that we wanted to understand better was about the times of the day, week and month. How does she know when to attend the malnutrition clinic? It is held on Tuesdays in the community we live in called Nakaale? We noted that she does not have a calendar, but knows exactly which day is which, relevant to other days. We proved this
from what she said: *On Sundays, I go to church, the next day I stay home, Tuesdays I go to the doctor, Wednesdays are market days, Thursdays are immunisation days at the clinic, then I stay home for two more days and it is time to go to church again.* I observed that though her activities are not written in an agenda, she knows when to go to the clinic, the market days, and when to go to church because of the order of events. I came to realise that these activities like visits to the clinic, market and church happen on fixed days, so she can arrange her other activities around the fixed ones with more flexibility.

She mentioned also that she counts both days and months, so she knows when to prepare her field for planting and when to harvest. Our observation revealed that the old men and women of the community use the position in the sky of certain stars to decide when to plant and harvest. When we talked to her about this, she said: *I know this method also, but it is easier to count the months, so that my children will not rely heavily on old ways of determining seasons of the year.*

Like all adult *Ngikarimojong*, she knows how to tell the time of day by the position of the sun. When the sun is still touching the mountains in the east, it is the first hour, following the Swahili clock, or 7am. When the sun is straight up above, it is the sixth hour, or 12pm. They can even tell someone to meet them at the ninth hour, or 3pm, by pointing their arm straight to where the sun would be at that time. This requires dividing the sky into twelve even sections (beginning at 7am because of the mountains and ending at 7pm when the sun sets). I am not very accurate at knowing the time of day without a watch, but they are accurate to the hour, though not with the minutes. They don’t measure each hypothetical section of the sky using a handbreadth, or similar standard, but they do estimate the equal increments across the span of the sky. Although some people in the area are also able to tell the time by the position of the moon as it moves across the sky at night, Nakiru does not know how to do it. She
says that she knows it is the middle of the night because the rooster crows, but only when the first light comes, does she know it is morning.

Though she says that neither she, nor her husband, can read, she does know of people that she can ask to help with any written instructions given by the clinic or from elsewhere. She cited Child Health Cards given out by clinics, on which dates are written for immunisations and follow-up visits as one of the examples of the circumstances in which she expects someone else’s assistance. Though she herself is not able to interpret the written instructions from these cards, she said: *I am aware of others in our community who will assist me to follow these time-sensitive instructions.* The second time we visited her, we asked to see her Child Health Cards. She only had with her in Akwiam the card of her youngest child born in the past six months. We noticed that he had only received his ‘newborn’ immunisations and not the following ones at either six, ten or fourteen weeks old. When we asked her why that was the case, she said: *I could not find anybody to read the card so as to tell me when to return to the clinic for follow-up.* Her response made us review the contents of the card and the ways to ‘read’ the symbols and graphs which had not yet been explained to her.

We asked her if she would be interested to learn more skills for reading. She said: “Yes. *I actually want to learn to read and write my name*”, she added. We asked her if she had attended any Functional Adult Literacy (FAL) classes, and she replied: *I went to two classes, but dropped out because the teachers did not come and yet I had other things to attend to.* She stopped going before learning to read or write her name. We asked her what time the FAL classes should be held and she suggested that in the early afternoon would be best. When we asked why, she said: *We women leave our homes to work in the early morning hours in our fields and return home in the afternoon. When we use the early afternoon hours to attend FAL sessions, we also need to return to resume our usual cooking work in the evening.* She also added that in the dry season, there is more flexibility than in the rainy season because then the fields and gardens need to be weeded often, and it rains fairly consistently in the mid-to-late afternoons daily, making meetings at that time less likely to be attended.

Another question we asked to Nakiru was regarding topics to be discussed
in the hypothetical, future FAL classes in their area. She said that many people would be interested in attending these FAL classes to learn to read and/or write their names and many other things. Topics that she herself would be interested to learn more about included: how to grow food, which kinds of food are edible for kids, how to care for family, how to use money properly, if she sells charcoal – what is best to spend that money on, and how much money to save (as she now spends all she gets/makes).

We also spoke with her about numbers and symbols surrounding currency. We noted that she is able to identify the numbers one and five when written in the sand randomly. When we asked whether she can write them on sand herself, she said, yes, and actually went ahead to write them very well. We realised that she was not familiar with the other numbers either numerically or alphabetically.

She recognises Ugandan coins and notes by their symbols instead of by their numbers; for example, she knows the two hundred shilling coin because it has a picture of a fish on it as depicted on the picture of the coin shown here. She knows the difference between the various denominations by the pictures and the colours of the paper.

To make money to feed her family, she often sells charcoal. We were surprised that she was still doing this tough work because she was visibly pregnant. She often pays men in the local community to help her with some aspects of this work. She said it costs her a thousand Ugandan shillings (Ug. shs 1,000/=, which converts to approximately US$ 0.50) to pay a man to cut down a tree. When a man cuts down a smaller than average tree, I feel cheated, but I will not quarrel with him about the price he wants to be paid or the size of the tree, she told us. When I asked why? she said: It is because the other men will refuse to help me in this work. When the tree is down, she then cuts it into smaller pieces of wood to bring to another man who makes it into charcoal. She will carry a large bag of charcoal into Namalu-town on a Wednesday to sell it. The bags that she mostly uses to fill with charcoal are those given out by the World Food Program (WFP). Although these bags when full of flour weigh 100kg, she knows by head
that one bag this size, filled with charcoal, should sell at Ug. shs 4000/= (= US$ 2). The bag acts as the unit of measurement and not the weight of 100 kg.

One other thing we noted with Nakiru was that, instead of paying the man who makes her wood into charcoal with money, she gives him some local sorghum beer. She needs to estimate how much beer to give, so that he will be satisfied and possibly willing to help her again with future work. She often gives more beer than the equivalent of paying him in cash. Even when she is weak or sick, she said that there is no one she knows to help her in this work. We asked about whether her husband, her mother, her neighbours or her children could help her; she said: *They don't help me, and for my children, they are still too young to do that.* With the money that she makes selling charcoal, she buys food from the market. Although it is an eight kilometre walk to the market, she will obtain more money for a bag of charcoal there, and then she is able to buy food from the market before returning home. The types of food that she typically buys are cooking oil, greens, maize and sorghum. Some prices in Namalu are fixed and some she is able to bargain down; for example, towards evening the produce becomes cheaper in the market. I saw that she uses several strategies to ensure that she and her family will eat well for a couple days after each Wednesday (market day), and then they will eat very little until the next time she can sell charcoal.

We observed that Nakiru does not keep any written records or use symbols regarding money. She told us that she spends all the money she raises right away and does not save money for later uses. This could be as a result of high prices in the market which ends up absorbing every coin she makes through the charcoal. We were not sure whether her failure to keep records of her spending was because she is always left with nothing at the end or not. It could possibly be a cultural issue where the majority of the people in her community are not practising record keeping, and they feel comfortable with keeping the record mentally.

The second time we visited Nakiru, she had been able to collect branches (stacked approximately a foot and a half to two feet high) to trade with the soldiers guarding the cattle in the barracks in Akwiam for three cups of sorghum flour instead of depending solely on charcoal business. Although
the soldiers would potentially buy from her every day, she still chooses to make charcoal some days. When we asked her why she was doing that, she said: *Now that I am not pregnant, and my husband is nearby to help me, I do not see it as a problem to continue with my charcoal business.* This was surprising to us because the work involved in making charcoal was more cumbersome than selling tree branches to the soldiers who were ready to provide her with a market on a daily basis.

**Conclusion**

Our understanding of Nakiru Rose was that she had had some previous experience with education and literacy. While she expresses a desire to learn more about health, it was not clear that she sees this as directly related to any need to read or write. She was pre-occupied with wanting to be able to meet the needs of her family and felt that she was doing this fairly well with her current level of literacy and numeracy. It would be important for literacy and numeracy programme designers to take into account such embedded literacy and numeracy practices so that what people come to learn is based on the literate ideas they already have. Literacy facilitators would therefore emphasise discussions on the experiences learners bring into their learning situation, so that the additional skills they will acquire can go a long way to improving their health. In that way, people like Nakiru would then reflect on their understanding of how health and literacy are related. At the moment, the connection between health, literacy and numeracy is unclear, so the teaching of literacy and numeracy in the context of healthcare needs to be anchored on what the local people know. These will help them link their current literacy and numeracy practices to what is being introduced to them in their literacy and numeracy classes.
Why I conducted the study
There is a widely held view that people living in fishing communities are ‘illiterate’ because they do not give priority to attending formal schools. Some experts have suggested that a vicious cycle of illiteracy exists in fishing communities. I chose to undertake a study to find out the truth.

I chose the health sector because then I was implementing a health-related HIV/AIDS Prevention Project. This project provided me with opportunities to interact with people labelled illiterate as they came to interact with health care providers. Regardless of their backgrounds, health seekers performed some literacy- and numeracy-related tasks, and that was the focus of the study.

How I carried out the study
In 2009, I was given an ADRA HIV/AIDS Prevention Project to manage in the islands of Bussi, Zzinga, Kava and Kituufu. This project provided me with opportunities to interact with those who had registered in the adult literacy classes which had been established by the project in 21 villages. In addition, every Wednesday, learners came to the Bussi Health Centre to attend health classes during which they interacted with health care providers. A number of people registered themselves for the adult literacy and numeracy classes, claiming that they were illiterate because they could not write and read the materials distributed by the project.

My participation in the health education classes at Bussi Health Centre made me a participant observer over that period of time. And I was able to obtain detailed information about some of tasks the ‘illiterate’ health seekers performed that involved the use of numbers and letters.

The case study
Among the many women who visited the Wednesday ante-natal clinic was one lady I observed most. She was talkative, always asking questions in the nutrition class I conducted. Her observable details included the
health tasks she performed that involved the use of letters and numbers. The nutrition class led me to the discovery that this young lady could not write or read in the formal schooled sense, but she performed some health-related tasks in which letters and numbers were used.

One Wednesday morning, she found me at the front verandah of the health centre. “We are happy to see you”. OK, musawo, she replied (musawo is a local word for health provider). Will there be immunisation today?, she asked me. “Oh yes”, I replied. She sat on the bench. ‘May I have a look at the immunisation card of your baby?” I asked her. She opened her bag, pulled it out quickly and handed it to me. From the child’s immunisation card, I saw the mother’s name, Ann. I called, “Ann”. Yes, musawo, she responded. I asked, “How is the baby?” The baby is fine, she responded with a smile.

Musawo, is your clock right? Maybe it is my phone which is not right, she wondered as she looked at the wall clock (see below) which she could obviously read.

“You first register on the attendance sheet”, the provider told Ann. Musawo, help me, you know my problem, I never saw the blackboard, she responded, meaning that she had not attended school to learn how to write. So the provider got hold of the pen and started asking for some information.
For every question the provider asked, Ann gave the answer. Some of the questions I heard the provider ask Ann were: “What is your surname? What is the distance from here to your residence? What time do you take from here to your home? How much do you pay the motorcycle? How much time do you take in the morning to get transport? How many kilos has your baby got?” Ann lifted and weighed the baby, she interpreted the weighing scale numbers and told the provider the weight of the baby.

The following Wednesday, Ann came earlier to the Health Centre. She found me there since I was staying near and I could always help in cleaning the centre. Musawo, when will the ‘doctors’ of TASO [The AIDS Support Organisation] from Entebbe bring medicine for ‘slim’? (‘slim’ is a local name for HIV/AIDS.) I have my friend who wants some tablets to complete her dose, said Ann. “We shall ask the nurse”, I replied.

The front wall of the health centre contained numerous commercial advertisements and phone contacts. The handwritten advertisements were generally in English and Luganda, Since Ann and I had become friends, she asked me to explain their meaning, which I did.

She always brought with her the health chart of her baby, answered questions, weighed her baby, administered the drip, took the child into the injection room and visited the doctor’s room. Ann could tell the distances to Entebbe referral hospital and estimate the time it takes to reach there. She had a mobile telephone and could call and answer calls. This demonstrated Ann’s ability to understand the symbols and labels on her phone.

Ann bought drugs at a nearby drug shop and could recognise products that she wished to purchase and the aisle where the products would be located. She could recognise safe cleaning products. Ann was also able to recognise plants that are safe to consume from a nutrition poster and how to prepare them. Ann could give her baby the right dose of medicine at the time she was told at the health centre.

Analysis
The above examples show that there are literacy/numeracy practices which are tied to Ann’s ability to decode text. These tasks often required
Ann to deduce which mathematical figure to use and then to use these in multi-step fashion. Since numeracy is multidimensional, it involves assessing when to use particular skills, deciding which skills to use, using the skills effectively to solve the problem, and then interpreting the results appropriately. Saving my telephone number in her phone demonstrated Ann’s ability to identify and understand the symbols and labels on her phone.

To act on her new health knowledge, Ann used letters and numbers embedded in the language she used everyday. To act on the commercial advert, Ann also needed attitudes, especially motivation and confidence. Ann had some attitudes like, ‘I can’t miss a chance’. We need to find out how we could strengthen what Ann had and build on that. If Ann wished to improve her health-related literacy/numeracy skills so she could perform better in a health-care environment, it is not a good thing to take her through the FAL primer first. Learning to read pages in the primer will not really motivate Ann when she wants to read health documents.

The process of negotiating access to healthcare between the seeker and the provider is embedded in social relationships and is shaped by relations of power and authority, and this requires a deliberate effort on the part of the one having the power to provide an enabling environment to allow a genuine relationship between them. Ann was always seen listening to the health service providers’ verdict on their condition and complied with the advice given.

Finally, this study provided additional evidence that many people in the fishing communities are not ‘illiterate’, because they understand and use letters and numbers everyday.

**Lessons from the findings**

The literacy products found at the health centre served several different purposes. In large part, literacy was used in this community to support the dissemination and sharing of health information, for exploring economic opportunities, to establish identity and community, and to regulate behaviour. Reading and writing have a very strong role in establishing community members’ personal and cultural identities.
This study provided evidence that some people in rural areas use health literacy/numeracy practices in everyday health, regardless of their backgrounds.

The examples discussed above give a sense of the variety of social and cultural behaviours and practices that constitute literacy/numeracy in a health care environment. Health literacy/numeracy clearly means different things to different people in different communities. Even within the same community, literacy/numeracy implies different things. If we are to build on what people already are doing with regard to literacy/numeracy, additional efforts are needed to develop multi-lingual products to help communicate essential health care information to the multi-linguistic patients. It may be useful to think of limited health literacy analogously to physical disabilities. We do not expect patients who are blind to read posters and charts; or those who are deaf to benefit from health talks.

Information services in the health care environment take a variety of forms including dissemination of information in anticipation of user needs or interests. Literacy/numeracy products available in the community show that many health educators need to understand their communities better, in order to be able to identify information needs from a different perspective. Ethnographic studies demonstrate how this could be done; gaining a deeper understanding of what is already taking place in the community would allow them to better meet those needs.

**Future developments**

Building on this case study may take the form of

- Helping others to learn the importance of seeing how other people ‘see’ their experiences. Because different people know different things, I will use the skills I have acquired to conduct appreciative inquiries to know how they learned this knowledge, and then use the same routes to get new knowledge to them.

- Discovering more routes for getting new stories to write and publish for new readers.

- Facilitating participatory planning, development, use and review of contextual-specific curriculum materials.
About the author: Bukenya-Muwonge Paddy is Coordinator of Self-Help Community Learning Centre (SCOLEC). He holds a Diploma in Literacy and Adult Education of Nsamizi Training Institute for Social Development. His research focus is on literacy/numeracy-related tasks performed by health seekers in fishing communities.
5. THE LITERACY AND NUMERACY PRACTICES OF THE OIL PALM FARMERS IN KALANGALA

Hajara Sengoma

Kalangala district is located in Lake Victoria and covers an area of 90,669.8 square kilometres. In 2006, Oil Palm Uganda Limited (OPUL) received an agricultural loan of $158m from the government of Uganda, World Bank and International Fund for Agriculture (FAO) which interested farmers could access through Kalangala Oil Palm Growers Trust (KOPGT). According to KOPGT’s manager, the trust has more than 515 registered farmers that have sold over 213 tons of fresh fruit to Oil Palm Uganda (as of 2010). Its report says that it trains the farmers on how to join KOPGT and how to manage the loan, and has improved 205 km of farm roads. KOPGT says that its major objective is to increase farm incomes and reduce poverty by involving small farmer out-growers in production and employment opportunities.

We first travelled to Kalangala in April 2010 to attend the LETTER training of trainers’ workshop. During the workshop, the manager’s presentation about the operations of KOPGT intrigued us into finding out how the farmers would interpret, understand and implement the new literacy and numeracy practices taught to the farmers by KOPGT. We returned to Kalangala for a fact-finding trip and held a three-hour meeting in the KOPGT manager’s office. While there, he shared with us about the whole system and provided us with several copies of materials and documents used to improve literacy. The group of farmers we met at that time informed us that those who were unable to sign the documents would seek for assistance from KOPGT staff, friends, family members and bank staff.

This research was carried out in Bwendero, Bumanji, Bujumba and Bugoma. We held meetings with groups of farmers and community members. We also held small interview sessions in some of the respondents’ homes.

1. Measuring the land for preparing the soil for planting oil palms: KOPGT uses a tape measure to measure out the land, but in situations when the farmer is in a hurry to prepare the land and is interested in saving on the time waiting for KOPGT staff to return, she will use a string that is
made out of banana fibre or sisal. This string is pre-measured on the tape. The cleared land has to have a length of 9 metres and a width of 9 metres. She will stand on one corner of her land and step on the beginning of the string while another person is pulling the string until it stops. This will continue until the land that she is interested in tilling is fully measured.

2. Holing: The spacings between the holes in which to grow the palm are required to have a standard of one metre length by one metre width. Here, the farmers use a small flat stick that already has these measurements.

3. Fertilisers: A variety of more than 8 fertilisers are used at different stages. When the palm is one and a half years old, the farmers are required to put half and a quarter of the fertiliser. The farmers have resorted to filling a plastic cup and adding on half of that same cup to meet those standards. As they said, *For any plant to grow these days, it needs fertilisers. So we have devised the cup method so that it helps us measure on our own. Initially, when the project had just started, it was easy for KOPGT staff to help us measure the fertilisers at all times. But due to the current high numbers, we had to devise means and copy or seek for assistance from farmers that were first trained by KOPGT staff.*

4. Harvesting measurements: When farmers harvest the palm nuts, they usually collect their harvest in one central place usually near the main roads. KOPGT has a fixed timetable showing when their staff with trucks will pass via each block. Farmers should be vigilant in
monitoring their palms so that they only harvest during the right time for the truck to pick up. Since farmers don’t have weighing scales, they rely on those that the KOPGT truck drivers carry with them. They have sewn a basket called ‘oluselo’ that helps them estimate the quantity of palm that they will be sending. Ten palm bunches if placed in an oluselo are equal to 2 kg.

One of the farmers, Mr. Ssemakula, says that he is very happy with KOPGT because now he is sure he will be able to educate his children. However, he requested us to speak to KOPGT to pay them on time. When asked why they use the oluselo, they said that it helps them make a rough estimate of their stock rather than relying on KOPGT drivers who arrive at their blocks when they (the farmers) are very tired, and who measure very quickly; the farmers do not always understand their weighing scales.

5. Writing and reading: Before a farmer joins KOPGT, they have to sign an agreement (MOU) between KOPGT and the farmers. KOPGT staff do all the reading and interpretation of the MOU, either in English or Luganda depending on the farmer’s preference. The farmer will then consult fellow farmers on a local and friendly basis. Once the farmer internalises all the procedures, they sign with the use of a thumb print or a signature. Those that do not know how to sign are often advised by KOPGT staff to try to learn how to sign for themselves. In the picture below, one of the farmers happily showed us how she has learnt the art of holding a pen and writing her name with the help of her children.
All the farmers we met said that they were very happy for joining KOPGT. When I joined KOPGT, I had to register but since I didn’t know how to write, I used a thumb print and have always relied on the help of my friends in everything; I am very blind. However, because I have children that are of school-going age, I sometimes sit with the eldest that is in primary four and learn how to write. I have now learnt how to write my name to help me with the signing in the bank. I am now very happy and will do anything to make sure that my children don’t suffer in the future like me.

Our greatest challenge is failing to understand the calculations involved. This is a business and we need to know how much we are earning and the rationale that KOPGT uses to reduce the inputs that were loaned to us. A concerned community member said, I wonder how my children will be able to manage this business when I pass away. They are not good at calculations, especially the ledger card, and that is my greatest worry. The good thing is that Mr. B- (KOPGT’S then manager) is still very loyal but what will happen after him? To tell you the truth, all we need is help in finances, i.e. calculations, and then how to ‘develop’ this money, because once farmers get their pay cheques, most of them simply spend it on drinking.
Another woman farmer said, *My family was very happy but now my husband is always beating me due to the money that he has gained from the palms. If your organisation can help us, then we shall be very happy. It’s this illiteracy that made us totally refuse to register before the beginning of this meeting and thank you very much for coming to Kalangala and showing interest to learn about our life style.*

### Conclusion

The main literacy and numeracy practices concerned managing production and accountability in a business. In numeracy, the farmers needed to understand how calculations are made based on the inputs loaned to them and also the harvesting measurements involved. In literacy, members cannot register before the beginning of the meeting because they cannot write.
6. SEMI-LITERATE MAMA-SAA's 50-YEARS’ EXPERIENCES IN MANAGING RURAL CHURCH FUNDS
Willy Ngaka

Introduction
Mama-Saa is a widow who resides in Nyata village of Arua district located in the North-western Uganda. She is a serious Christian who has been serving as a treasurer in her church for over 50 years now. Her husband passed away in 2004 and left behind five children. Besides taking care of her own children, she also takes care of four other children of her co-wife who also died shortly after the husband. Although she does not look so, Mama-Saa said she is now 75 years old. Ever since I came into contact with her (in 1975), she has been an amazing woman doing a variety of extraordinary things not commonly observed with her peers.

I came to know her when I had a misunderstanding with my father over his indifference in giving school fees for me to start my primary education. This made me flee our home and go to stay with my maternal grandpa in Nyata village. It was there that I had my first encounter with Mama-Saa. She was married to my uncle, who by then was the Chief for Bura Sub-Parish. While with my grandpa, I was fond of looking after herds of cattle, and not thinking of going to school anymore. However, when the idea resurfaced, there was no-one to give me the school fees I needed. I still remember vividly that when I insisted on going to school, it was she who wisely suggested that I do some manual work for her in exchange for a hen, which later laid the foundation for starting my primary education. In fact, I credit her for helping me become who I am now. Thereafter, I started going to school together with her children, and since then, I have observed that, unlike many of her friends who never cared about their children’s education, Mama-Saa made every effort to ensure that her children receive some reasonable education. You children hurry up and go to school, it is getting late, she would remind us and we would obey.

A careful look at Mama-Saa, who said that she dropped out of school while starting her 5th year, does not seem to support what she says because

1 Mama-Saa is a pseudo name used for the purpose of this case study. The photographs which appear in the report are being used with full consent from her
her humility deluded most people to believe she never stepped into a classroom. She is a very humble and hard-working woman who is always active in everything she does. While I was still a small boy, I noted she was more active in religious activities than anything else. She attended church services regularly, offered to teach us how to say prayers, encouraged us to learn different hymns, taught us some issues in catechism, and ensured that we went to church every Sunday. I came to realise that all these activities she was involving us in, to a greater extent, required some engagement with literacy and numeracy.

When I completed my primary education and proceeded to my secondary and university education, I temporarily lost touch with her. However, in 2005, I decided to set up an intergenerational literacy learning programme in Lokotoro village under Uganda Rural Literacy and Community Development Association (URLCODA), which attracted many women including her. When, under the LETTER workshop, we were given an opportunity to undertake a study of the literacy and numeracy practices of members of the community, I decided to go for Mama-Saa and try to understand her literacy and numeracy practices in the different activities she is involved in, using ethnographic lenses and perspectives as described below.

**Methods used**
I adopted a case study approach to examine Mama-Saa’s lived experiences as a rural church treasurer without solid formal educational background. I employed ethnographic perspectives and tools to aid my data collection process in the course of the study. I drew upon my long history of interaction with her in the 1970s and 1980s to complement my observations and informal talks and discussions with her, beginning from the middle of 2010 onwards when she started to participate in the URLCODA literacy classes. Together with my research assistant, we used several methods to realise our ethnographic dimensions of the study. We made observations of different activities Mama-Saa engages in such as at home, market, church and the intergenerational literacy classes she had started attending. We carried out informal talks and interviews in Lugbara with her, and examined the different types of documents we found in her possession and all the literacy events surrounding her home.
We also compared the various documents we laid our eyes and hands on, with what we saw and what she does all the time. We did this over some months, and even drew upon many observations of her I had made some 2-3 decades back when I was young. It involved back and forth movements to confirm certain assumptions we might have held about the case. In the process of data collection, we adhered to the key ethical considerations and sought her permissions for everything we did, including taking and using her photographs in the report.

**Description of our interaction with Mama-Saa in her home environment**

We made several visits to Mama-Saa’s home, located 500 metres along a road from Arua town that proceeds to Uganda’s border with the Democratic Republic of Congo. Her home is just 4–5 km from the Uganda–Congo border, where there is a big market called Odramacaku. The market, which operates on Mondays and Fridays to serve the people of the two countries, stretches across the border. She said that she walks to the market to sell or buy some food and other household items she needs for her home. We noted that, being a cross-border market, she could be encountering many literacy and numeracy events and practices in the process of interacting with different people from the two countries. We decided to find out some of the evidence from her how she managed. A few of the examples we found can be seen in the photographs below.
“You have a wonderful and clean compound”, I told Mama-Saa, during one of our visits. *You must be kidding, aren’t you?* she asked. “No, I am not kidding, you really have a wonderful compound”, I insisted. *Thank you*, she said. As depicted in the above photographs, Mama-Saa indeed has a wonderful home by village standards. At the far background are some beautiful green trees, which she told us are sometimes used to feed goats during the dry season when all the grass has dried up. She also said that they grow some food crops and green vegetables in the outskirts of the homestead. Most of the houses are circular, mud-walled and grass-thatched, except for one which is rectangular and has burnt brick walls roofed with corrugated iron sheets.

A quick scan across the homestead reveals that, in carrying out her everyday activities, Mama-Saa is engulfed by a number of literacy and numeracy events and practices. In the shortest time possible, we were able to see texts on other surfaces such as the doors written by immunisation officials, labels on utensils such as plastic cups and plates, and evidence of children’s writings on the mud walls. This gave us an impression that there could be a possibility for finding more documents from her.

As we approached the middle of her compound, Mama-Saa rushed to pick a mat from her house. *Come-on, sit down here*, she told us. My helper sat with her on the mat, while I remained standing and sought her permission on whether she could allow me take some photographs in the course of our interactions. *It is alright, you can take some photos if you like*, she said. After we settled down, we asked whether Mama-Saa went to
school, and if yes, how far? Yes, I went to primary school, but dropped out before reaching my seventh year, she replied. “At what level did you drop out and why?” I asked. This happened when I was about to start my fifth year. It was because my father was a peasant and couldn’t afford to pay my school fees. He preferred to marry me off because his priority was getting bride wealth from his daughters instead of educating them, she answered. When we asked whether she can read, write and calculate, she said, No. I guessed that she was not giving a correct response because she had indicated earlier that she dropped out from primary class five. To prove what she said, we then asked her if she keeps some documents in her house, and she said: Yes. When we requested to see some of them, she said: You may not see many because most of the documents I used to keep were burnt during the guerrilla wars when we were refugees in the Democratic Republic of Congo…, but it seems I can get for you some few. She entered her house and brought a few documents, the majority of which were of a religious nature. As can be seen in the photograph above, she is holding a Bible. The documents included Mothers’ Union membership certificates, tithe payment receipts, confirmation certificates, baptism certificates, her Bible and hymn book, and an old wrinkled exercise book with certain figures scribbled against some peoples’ names, which I guessed could have been some financial records.

**Literacies/Numeracies Mama-Saa uses in her routine household activities**

We were interested in knowing exactly what she does in her day-to-day activities. We saw that Mama-Saa depends on subsistence agriculture. She grows different crops like beans, maize, sweet potatoes (*maku*), Irish potatoes (*mbge- mbge*), cassava and a variety of green vegetables on a small scale. She also rears some domestic animals like pigs, poultry, goats and rabbits. She said that she sells some of these agricultural products in the market for raising money to maintain her family and pay her children’s school fees. She likes rearing pigs more than other animals. When I probed further to find out why, she told us it is because the pigs multiply very quickly and she can sell them easily, unlike cows and goats for which she needs permission from elders in order to sell them. She told us that sometimes one pig can deliver 11–12 piglets at a go as compared to a goat which rarely produce more than one kid at a go.
When we asked whether she sometimes encounters circumstances in which she is forced to use her skills of counting, calculating, reading and writing, and if so, in what areas? she said, *Yes. I encounter these in a wide range of areas of my daily operations. For example, every day, I must wake up early to go to the valley and fetch some water from the well, clean the compound, prepare breakfast, go to the garden and dig, come back to cook something for lunch (if it is available), go to look for firewood for cooking, and participate in other duties outside the home such as church activities, going to the markets and going to literacy classes.* All the activities she mentioned entail numeracy-related issues such as distances covered, time, amount of litres of water needed and buying and selling things in the market. We also noted that her roles are not just limited to the household issues alone, but extend to include other demanding responsibilities beyond the household. Among such outside roles, we discovered that she has been a church treasurer for over fifty years, a Women’s Leader in her Parish for over 20 years, a Revival Leader for 15 years and an Intergeneration Literacy group participant. All the mentioned activities put a tremendous pressure on her in terms of literacy and numeracy skills and yet she lacks solid formal educational background.

Our observations and discussions with her show that she uses her non-formal literacy and numeracy skills to perform duties for which literacy and numeracy are unavoidable. They included: (i) counting things in her control such as money, her animals (pigs as in the photograph above), eggs, days, weeks and months, (ii) managing her own monies and that of the church and other women’s groups, (iii) finding her way through different places like markets, health centres and hospitals, (iv) calculating her balances/change when transacting business with sellers in the market and asking for receipts for market dues when she is asked to pay them, (v) leading and directing activities of the women in her church and parish, (vi) determining distances covered on her way to Arua town market using milestones, (vii) reading the Bible and leading hymns in the church services; and (viii) monitoring the execution of her daily household tasks. In the photograph shown on the left above, Mama-Saa was captured with her grand children trying to pick out ticks from the ears of her two piglets. Picking the ticks is also a numeracy issue because the ticks themselves are countable.
Mama-Saa's Experiences as Church Treasurer

Of all the above areas in which she employs her own literacy and numeracy skills, we were interested in finding out her experiences in serving as a community church treasurer and women's leader for more than five decades. One of Mama-Saa's roles in the community has been to keep the funds of the church; so we tried to find out exactly what she does as a church treasurer and to what extent that requires literacy and numeracy in her context? In her response, Mama-Saa outlined her specific duties to include: receiving monies collected on Sundays for safe custody, disbursing monies needed for undertaking specific activities, giving out financial assistance to members in emergency situations, receiving monies from members who borrowed emergency funds, giving accountability for the monies spent for the finance committee of the church, collecting contributions during funerals, and reminding debtors of their timelines for returning monies borrowed. This means that she is managing several funds in different accounts, but not in the bank. These include accounts for Sunday collections, special fund raisings, funeral contributions and funds for the women's group. A critical look at the above tasks in our times would ordinarily require the services of a person with formal qualification and skills in accounting, business administration or commerce, a privilege which Mama-Saa did not have. However, she has managed to do them for over five decades, which raises a number of questions such as: How did she get to that position? How has she managed to remain in it for such a long time? What do other people in the church say about her? How does she feel about her work? What challenges does she face in her work? What advice does she offer to other women?

Before responding to the issue of how she got to the position, Mama-Saa smiled a little and said: Our positions in the church are voluntary, so there are not many people who are willing to work for free. Besides, we do not keep our funds in the bank and one has to devise secure ways of keeping the funds without being confused. This makes it a cumbersome task which many avoid, if possible. We asked how then does she maintain the different accounts? She said: I use my own simple ways to keep the accounts separate. Whereas I am able to keep the totals and balances of each account in my mind, I designed different bags with different colours to keep monies for different purposes. I then developed some paper cards which I used to estimate the
When I give away a certain amount of money from a particular bag, I remove some cards equivalent to the amount of money I have given out and this helps me to balance the accounts. I asked her, “Did you use to like mathematics very much in the short period you were in school?” No, she answered. Though I liked adding and subtracting, I found it hard to multiply and divide, she added. I thought her plan is a brilliant idea because it brings to the fore the different ways we can use to solve the same problem. As for why she has remained in the position for such a long time, Mama-Saa said: Since other people in the church tend to shun the post of a treasurer because it is voluntary, I have remained to push the work in the spirit of serving the Lord and waiting to reach a time we can get another volunteer to do it. I think many people would have aspired for the post if it were a paid position.

Concerning what other people say about her, she said: Most people, especially my colleague women, say that I am a strong-hearted woman, whom they not only fear, but also respect for the good and clean behaviour I have maintained all these times. She said she once heard a woman remark: We do not hear about disappearances of our church monies, she is really doing a good job. When I asked how she felt about such comments, she said: On the one hand, I feel great. On the other hand, I feel sorry for myself, because I could have been doing greater things than the ones I have done, if I had gone further with my education. This highlights the views of dominant literacy and numeracy in which people like her are considered to be deficient in certain areas and this makes her less satisfied with what she has managed to do in life.

When asked to comment on the challenges she faces, she said: Since I cannot read, write and calculate perfectly, it means I would not be able to transact business in the banks without being cheated once in a while. I am only lucky that we do not keep our money in the bank; as a rural community, our monies are small and we keep them at home. I also face a challenge of not having accurate records of the monies I keep since I do not trust my literacy and numeracy skills. Keeping records mentally is risky and I fear I might run into problems of being defrauded by some unfaithful members.

We also asked her about what she does to recognise different denominations and differentiate currencies, especially in their border
market. *I use different skills to recognise currencies, some of which include shapes, sizes, colours, symbols, pictures or portraits of leaders as some of the tricks to identify and recognise various denominations of our currency. For example, the Ug. shs 100 coin is bigger in size than Ug. shs 500, which also has a different colour as compared to the Ug. shs 100 one. The Ug. shs 1000 notes is brownish and smaller than the Ug. shs 5000 which is greenish.* For Uganda shillings in the form of notes, she also uses symbols/pictures on them to differentiate one from the other. To do this, she uses the pictures of the Uganda cobs on the 1,000 shillings note, the banana on the 10,000 shillings note and the cow on the 20,000 shillings note respectively. In order to differentiate one currency from the other, say Uganda shillings from the Congolese francs, Mama-Saa told us that she uses the symbols on the currency notes. She said: *I know our present Uganda Shillings notes do not have a photograph or portrait of our president, so if someone gives me a note with a photograph, I will not accept it because it won’t be a Ugandan currency.*

We also tried to find out why she was interested to join a literacy class at a late age. She mentioned her desire to perfect her reading and writing, to learn how to count and calculate things perfectly, and to enhance her communication skills as some of the important reasons. During my observation of the classes, I noted that she showed a lot of interest in sessions focusing on numeracy-related issues, and I think this could possibly be attributed to her long history of being a church treasurer. When I asked what she likes in her present literacy classes, she said: *Before I dropped out of school many years ago, I used to like Scripture Union (religious studies), Geography and Storytelling, but now, I would like to get skills of adding things, subtracting things and communicating easily with people I work with and for. My problem in the present class is that I am not doing well with the skills of multiplication and division.* I noted she was really interested in her class work, and whenever I tried to reinforce her positively, she would always take it as a joke and say in Lugbara: “*Ba diyi la, emi ede ma ’dini kuuni*” – meaning, *You people, do not make fun of me like this.*

There was one other interesting phenomenon I observed with Mama-Saa during her participation in the intergenerational literacy sessions. I noted
that during reading sessions, she would read her Bible in Lugbara, her mother tongue, very well, and do the same with the contents of her hymn book. However, when she was presented with another text not from the Bible or hymn book, she would not read them as well as she did with the Bible and the hymn books. Neither could she read handwritten texts. This means she cannot comprehend texts, whether printed or handwritten, that come from outside the Biblical context. It is a phenomenon which deserves further inquiry.

Conclusion
This case study examined the literacy and numeracy practices of Mama-Saa who has been serving as a church treasurer for over five decades. She is an example of people who function very well in a literacy- and numeracy-dense society but still claim that they are non-literate and therefore not useful to themselves and the community. Clearly, Mama-Saa was executing tasks for which literacy and numeracy was required, and when we asked whether she went to school, she doubted herself and labelled herself as a dropout who cannot keep records of what she does. On the contrary, in an examination of all the documents she allowed us to examine, she brought out an old book she used to record debtors. She was also capable of reading the Bible and hymn books perfectly in Lugbara, though she cannot read other texts. She was able to educate her children and take care of her co-wife’s children after her husband’s death, using street-wise literacies.

Lessons from the case study
Learning from the experiences of Mama-Saa, we should not use the influence of dominant or formal literacy to dismiss people who can use their street-wise literacies to accomplish their goals in life, but rather encourage them not to give up on life and refrain from shunning programmes intended to improve the lives of the poor. This means we need to consider literacy and numeracy as social practices implicated in power, politics and social systems so that their meanings, uses and consequences can be understood in the context in which particular groups of people live. Through literacies, we get connected and acquire social identities or labels which make us function in different settings; hence emphasising formal literacy at the expense of embedded literacies that have helped many people
survive for generations and generations should be discouraged. Providing opportunities for enabling people like Mama-Saa to showcase their work can complement ‘the war against illiteracy’ among the communities, thereby helping many other people to demonstrate their skills, capacities and potentials for taking up leadership positions in the community. This requires a thorough understanding of the different literacy and numeracy practices which have helped them to survive in difficult environments and devise mechanisms to turn them into better survival tools for the entire community. There is need to transform the approach we use towards teaching adult literacy and numeracy from a teacher-centred one to a learner-centred one based on the real life situations of the learners. Teaching such people should gradually progress from the known to the unknown, using the learners’ first language (mother tongue) and then moving to other levels of languages.
7. THE LITERACY PRACTICES OF A FRUIT FARMER AND VEGETABLE SELLER
Ojan Egits Tommy

This paper reports on a case study which focuses on the literacy and numeracy practices of farmers, both men and women, of Romo village in Kangai Sub-county south of Dokolo Town towards Amolatar District about 16 kms around Kabalega market, a historical site where two great kings in Uganda were captured during the colonial rule in Uganda. Specifically, the case study involves a husband and wife, Ogondiha David and Sophia Amayo, who were residing in that locality and participating in the Functional Adult Literacy (FAL) programme implemented by the Ministry of Gender, Labour and Social Development, and some NGOs like CPAR, ADRA, CFI etc.

Information was collected using ethnographic research perspectives, including interviews, observations and discussion. The findings of the case study have three important dimensions: there are literacy-related practices within the household as a result of literacy learning programmes and support given by different actors including District NAADS programmes; secondly, people have their own indigenous and traditional-based skills and knowledge of numeracy and literacy practices applied in the day-to-day life; and thirdly, there are environment-related-literacy practices.

On 4th July to 7th July 2011, I travelled to Romo village adjacent to Abalang River to meet Mr. Ogondiha and his wife Sophia Amayo, who are FAL learners on income-generating activities (IGA). The office for FAL Co-ordination is about 2 kms away from their home, where we met. I had the opportunity to talk about issues concerning their life, and that helped me easily to start discussions and build trust.

As I went into their compound, I was greeted and requested to have a seat on a local chair with three legs call ‘adany’. As I prepared to start discussion with Ogondiha and Sophia, I was called to order for prayer as it was my first time to visit their home. After a short prayer led by Sophia, I had the opportunity to observe the environment around their courtyard. Like most rural homesteads, on one side of the compound there were fruit trees (mango stems, oranges), and four scattered grass-thatched houses, and animal structures (goats, cattle, poultry). Near the kitchen, there was
a digging rake and an old feeding pot sunk in the ground with water for the chickens.

**Ogondiha’s chickens**

As an entry for discussion from what I observed around the courtyard, I asked Mr. Ogondiha, “Why have you set out your compound as it is so attractive?” David and Sophia replied, *It is for good health and environment protection. If we do not set the home well, then in future re-organisation may be difficult. I learned that a good siting and structuring from the beginning will allow for setting up of other vulnerable activities around a homestead.*

Ogondiha and Sophia seem to be vigilant in maintaining cleanliness and order in their compound. Considering this as one important item related to the subject, I asked Ogondiha and Sophia, “Your compound is so organised, can you tell me how and why you do that?” Ogondiha responded by referring to the time when his father was the Sub-county Chief in the 1950s and ‘60s, and the knowledge of farming he gained from school when he was in lower primary school and the activities he underwent about the school garden and irrigation. He learnt from the school farm then.

I learned that Ogondiha was one of the beneficiaries of the farming methods linked with FAL Programme. I asked him what he had done with the skills he got from the class. He said that he took one of his bulls and sold it for Ug. shs 500,000/=; he added some money from the sale of sugarcane Ug. shs 300,000/=, egg plants 120,000/=, oranges 72,000/=, tomatoes 202,000/=, goats 400,000/=, and chickens 150,000/=. 
During our discussion, I realised that the source of income of the couple is agriculture. They have a big plot of land adjacent to a swampland for growing both fruit trees (citrus), 200 grafted stems, maize 3 hectares that give about 300 kg in a season. They confirmed this satisfied their home needs and school fees for their children for a term. To overcome other problems affecting the family, both of us are engaged in other income generating activities on top of the farming.

My husband works as a church leader in the town outskirts and I prepare the tomatoes, sugarcane and citrus for the market. She narrated her story how she started her sales. Unlike many other newly married couples, we had nobody to give us any presents as in other cultures. I lost my parents when I was 17 years old. I grew up with my stepmother, then I moved to Akurolango to stay with my aunt. That is when I met Ogondiha, my husband who had been working as a youth leader in a church near my aunt’s home. When the church leaders came with the guidelines on marriages, my aunt helped me, shaped me to have the church code of conduct, and having done all required, I was made to marry with Ogondiha. He brought items, helped by some church members - i.e. cattle, chickens, goats and money.

We started our marriage, but I did not know how to sell some of these crops, e.g. tomatoes, eggplants, sugarcane. I remembered my aunt; I recalled she had been selling these items in Kabalega market, and I looked to see how she heaped and measured by using her sizes which were accepted by the buyers. Since then, I have been selling all our produce myself. I asked her, “How do you calculate the profit and keep the record?” She told me that since she had lost her parents in their middle age, she could not continue with her studies, and so she cannot calculate the balance, but she has everything by heart. She does not use standardised measures such as kgs, although she learned these in the FAL programme, but she calculates using sizes, heaps and cups. I use shapes and feeling in the hand. For example, tomatoes, 5 heaps bring Ug.shs 1.000/= at 200/=; dried eggplant, a cup is 500/= each, and I count by heart, so that 2 cups equals 1.000/=.

I have a specific place in Kabalega market that falls every Thursday. My customers from neighbouring places know my place which is near the road and under a mango tree; and due to the quality and frequency, people know me that I have specific products according to seasons.
Remembering the discussion we had while walking in their fields about the lessons she took in the FAL programme on modern goat rearing, I asked her, “Why do you prefer this activity more than other income-generating activities like goat rearing?” She replied, *The other activity was goat rearing sometime ago. An epidemic erupted, killing many of the goats in our village. This made us to sell ours at a low price so as to avoid being victims of the epidemic. Though we were trained in modern goat keeping and vaccinations for prevention, we found it very expensive and laborious. The production of known crops is simple as it involves land opening, planting, weeding and harvesting, all using simple tools, and then selling - unlike goat rearing that requires an extension worker and treatment and needs close monitoring and reporting all the time.*

I asked, “Do you mean having children to help with extension work is the solution to the problem?” She said, *No, it is not; rather it is a big burden, we have to struggle to have enough wealth for our four children, two boys and two girls. We are only preparing to help them to have enough resource for their life in the future.*

Ogondiha, her husband, is fighting poverty by engaging himself in different activities. He is working as a fisherman using a locally made boat for fishing and selling in the nearby trading centre of Abalang–kokonjero. He is also engaging in practical tree nursery growing, which helps them to cultivate and sell seedlings of pines, gravellier, citrus and red pepper.

While I was observing the fields, I saw some wrapped plastic tubes, and on one of the mango trees, high up, a two hundred litre drum of water; he
told me that this was for irrigation purposes during the dry season, from December to February every year. He also told me that all the tools he used needed to be kept well to avoid wastage of money to buy the same items every year. He said, *We are using all resources available, for example, dry leaves to maintain soil fertility, using degradable and non-degradable waste to keep our environment clean, and keeping our toilet with hand-washing facilities - these practices have made the sub-county of Kangai to award us a certificate of merit under the NAADS Programme.*

Finally I asked them, “Why do you feel you need literacy?” They said, *We need literacy to keep and maintain our detailed records, to read and count numbers, not to be cheated by some merchants and to keep our health well.* But there are no signs that in fact they keep such records and it is clear that they keep their counting system and calculation by using no paper. The FAL programme was more useful to them for its social and skills benefits than for the written forms of literacy and numeracy taught.

I noticed that the couple are fighting poverty as much as they can. They have their own forms of literacy and numeracy skills that help their daily activities.
8. A PIG FARMER IN A DEVELOPMENT PROJECT
Augustine Napagi

Background
This is a study of the literacy and numeracy practices that Alice (not her real name) uses to accomplish tasks within the Literacy and Family Employment Skills Development Intervention programme sponsored by Kabubbu Development Project (KDP). Kabubbu is one of the suburbs located 35 kilometres north of Kampala, the capital city of Uganda.

Alice, who is in her early twenties, is an inspiration to many because of her achievements in the above project. She is a mother of three children with a very low level of formal literacy, since she stopped schooling in primary class five. She was in a poor rural school and, like many poor adults, she had to withdraw from school with negligible formal literacy skills, and thereafter lapsed into formal illiteracy due to lack of practice. However, she had an opportunity to join a Functional Adult Literacy (FAL) class through Kabubbu Community Library, one of the projects of KDP. At the time she joined the FAL programme, she said that she was only able to read and write her name. She also knew how to sound and write the alphabet fairly well. She now loves reading religious books in Luganda. This study sought to use ethnographic perspectives to gather data about Alice’s literacy and numeracy practices in the KDP activities with a view to understanding how these practices enhance her chances of doing remarkable things in the project.

Methodology
In this study, I adopted a case study design and employed mixed methods approach. I particularly drew from ethnographic perspectives and lenses to gather data on how Alice uses her literacy and numeracy skills to operate within the KDP. Mainly, I made use of observation, informal interviews and critical examination and analysis of documents which could be found with Alice. Alice granted me permission to proceed with the study. We mainly engaged in informal discussions and conversations. Then I analysed the records of our discussions, observations and the evidence from all the documents I managed to lay my hands on. The findings of my study, with special emphasis on her skills of record keeping, strategies for
managing profits and losses, balancing domestic expenditure, income and savings, property management and financial challenges, are presented in the following sections.

**Research findings**
As reported earlier, Alice dropped out of primary class five. She can now read, write and sound the alphabet letters fairly well. She seemed to have acquired the initial skills for joining words and syllables from her participation in the Kabubbu Community Library Functional Adult Literacy Programme. When I tried to confirm where she learnt the art of joining syllables, she said: *I learnt how to join syllables to form words and to join words to form sentences in the Community Library. I say this because when I came, I could only understand single letters and not combine them.*

Below is Alice’s adult literacy work book:

![Image of Alice’s adult literacy work book]

Note the distinction between the formal exercise sentences of the class and the more informal noting of the telephone number and name in the top margin.

As usual, Alice has put her client’s mobile phone contact in her book, with a name, in the margin. The formal sentences are written in English, then translated into Luganda. This is written in Alice’s own handwriting.

Her participation in the Functional Adult Literacy classes helped her enhance the little she knew in terms of reading, writing and calculation at home. This became a serious source of inspiration for her to take advantage of other opportunities in KDP. For instance, she benefited from the concept of the ‘pass the piglet’ activity which was a follow-up action by the Community Library to help adult learners exercise their newly acquired functional literacy and numeracy skills in their real life situations. In this exercise, Alice received fifteen thousand Uganda shillings to buy a piglet.
from the librarian. Speaking from memory, Alice said: *I received twenty thousand shillings from the library to buy a gift piglet two or three years ago.* Asking Alice whether she kept records of her dealings with the librarian, I found out that at that time she kept no records. To cross check her memory, I followed up with the librarian who regularly keeps records of the library-user transactions. Although the librarian verbally ascertained that each beneficiary of the piglet project received Ug. shs 15,000/= only, a reference we made to the written records with the librarian showed some discrepancies. We noted that over a half of the beneficiaries had signed for one hundred and fifty thousand Ug. shs (150,000/=) instead of one thousand five hundred shillings (15,000/=) for buying a piglet in 2007. Surprisingly, the librarian thought that all the beneficiaries had signed for Ug. shs 15,000/=, while for Alice, she thought she had received Ug. shs 20,000/=.

I wondered why Alice thought she had received twenty thousand shillings, and later discovered that she confused prices prevailing in 2010 for a piglet which stood at Ug. shs 20,000/=, while the price was Ug. shs 15,000/= in 2007. Both the librarian and Alice had challenges with the zeros at the end of large figures in their written form.

Notwithstanding her challenges with written records, Alice made remarkable progress with the piggery project. The piglet she bought at fifteen thousand shillings in 2007 grew well and had already produced for the third time. She had sold off the mother pig and replaced it with offspring. In the three times the mother pig produced, it gave birth to a
total of 28 piglets – 8 (first time), 10 (second time), and another 10 (third time) respectively. I noted that Alice never wrote all these figures down, but rather kept them in her memory. I heard her recollecting herself and saying: My gift pig initially produced 8 piglets, of which I took one to the owner of the boar which mounted the sow. With another piglet, I passed a gift to the next beneficiary. I kept one for rearing and I sold off the remaining five at twenty thousand¹ shillings each, earning me a total of one hundred thousand shillings, which I invested in growing cabbages.

With the second round of the 10 piglets, I paid the owner of the boar with one piglet and sold the nine at twenty thousand shillings each, earning me a total of one hundred sixty thousand shillings, which I used for renting land to grow food for sale. When the price of my potatoes, cassava, pumpkin and matooke goes down, I do not sell them, I use what I produce to feed the pigs.

Also with the third round of the 10 piglets produced, I, as usual, paid the boar owner with one. Unfortunately one of the piglets was eaten by a dog, I reserved two to continue farming, sold off six at twenty thousand shillings each and sold the mother at one hundred fifty thousand shillings. All together, I earned two hundred and seventy thousand shillings and used this to rent land to produce more food for sale, home consumption and feeding the pigs.

From what I saw, Alice was not doing badly. I asked her why she preferred to hire the boar which keeps taking away a piglet each time she rents it and she said: I can’t keep the boar because it is expensive to feed. Of the two piglets she kept back which quickly grew, one had produced 8 and 10 piglets in succession, and the second had produced 9 piglets. When I asked why her piglets were doing well and growing faster than her friends’ pigs, I realised she was fully aware of the value of the feeds she produces naturally herself in her garden as compared to those other people buy from the market. She explained it to me as follows:

I feed my pigs and piglets on leftovers from my gardens such as potato vines, cassava leaves and garden weeds. Other people do not grow a lot of food like I do. I feed my pigs on garden and kitchen waste and that is why they are doing well. I give them plenty of water too. I put a handful of brown salt into two five-litre jerry cans of water for every pig. Without

¹ She meant Ug. shs 200,000/= - and all her figures are again inaccurate.
PIG FARMER

salt, the pigs do not take much water. I learnt about brown salt when I saw a picture of a pig on the packet of salt. So I knew it must be good for pigs as well. Also when I can’t get good prices for the food from my gardens in the market, I use it to feed the pigs. I do not depend on food bought from the market. I only buy maize bran when it is cheap, and feed pigs on them once in a while, when I can’t collect enough feeds from my garden or kitchen.

At the time of carrying out this research, I counted and found out that Alice had 13 piglets, 10 of which had been booked by prospective buyers. This time round, she had adopted a culture of keeping records of all the prepayments to track the instalments made by different clients. She recorded the names of clients, amount paid and amount remaining, and their phone numbers. However, she did not put dates. She also did not keep records of any other thing she sold, though she exhibited a good memory of any financial dealings she had been engaged in. She counted her profits in terms of sales and had no way of costing her inputs.

Below is an exercise book that Alice uses for her Functional Adult Literacy class with some mobile phone contact numbers for her clients.

When I asked how she minimised her costs she said:

*I buy some little maize bran, like for thirty thousand shillings. I only give the pigs maize bran when I fail to get enough from the garden waste or the kitchen leftovers. Now I am going to buy some maize bran because I*
have heard the prices have dropped. I buy when it is cheap and keep it to avoid buying it at higher prices. I also grow beans and groundnut to avoid buying them from the shops at high prices.

When I asked her why she focuses more on dealing in piglets, she said: *I prefer selling piglets because it is expensive to feed grown up pigs.* When I asked why she is using more of farmyard manures than chemical fertilisers, and what else she uses to enrich her soils, she said: *I use farmyard manure because it is cheaper than chemical fertilisers and I am also told that it is not destructive to the soils.* Last season, I bought a pickup of farmyard manure at thirty five thousand shillings only and it was enough for use on a quarter of an acre. I complement the farmyard manure with the practice of crop rotation as we have been taught in our Functional Adult Literacy class. I also bury weeds which pigs don’t eat into the soil, I don’t use herbicides as they make the soil unfertile and dry. I only make sure I weed early to avoid over growth of weeds. *This keeps my gardens productive and I do not get crop failure even if there is drought.*

Alice tethers her pigs in her banana garden so as to keep the manure in the garden and also to ensure free aeration and a clean environment for pigs. She said that growing food crops is becoming costly during the drought and she would like to keep a cow instead, for which she was busy saving money. When I asked her how she saves money, she said: *I don’t hire labour. I do all the work by myself. Sometimes my husband helps me. What I hire is land, each quarter of an acre is thirty thousand shillings a year. This helps me to save.*

At the end of it all, Alice, who had very little background of formal education, exhibited an exceptional interest in developing her literacy and numeracy skills to excel in KDP activities. She was able to move from almost a ‘nobody’ (as she felt) to a woman who was literally independent. She was active in every activity that came her way. She learnt from others including her husband. Her husband acknowledged that Alice was the brightest of his three wives and she was the only one who learnt what he taught her about farming. She is always observant like her husband. The husband added, *I actually taught myself to farm through observation and creativity.*
About the author: Napagi Augustine has a bachelor of Social Sciences degree in Political Science and Social Administration from Makerere University, Kampala(MUK) and a Diploma in Educational Management and Project Planning from Kyambogo University in Uganda. He is a Functional Adult Literacy Instructor and the head of Department of Community Education in Kabubbu Development Project. His future quest is to put ethnographic approaches into Functional Adult Literacy programmes.
PART III

Note: quotations in quotation marks come from the case study reports: those in italics come from the respondents themselves.

In this third section of the book, we discuss first some general findings from the case studies, and then suggest some implications of these for the teaching of literacy and numeracy to adults in the context of international development.

I: FINDINGS

In this third section of the book, we discuss first some general findings from the case studies, and then suggest some implications of these for the teaching of literacy and numeracy to adults in the context of international development.

1 Meanings of literacy

Most of the people interviewed described themselves as ‘illiterate’: “When we asked whether she can read, write and calculate, she said, No.” (49)

1.1 Literacy as schooling: For most of these people, ‘literacy’ means schooling (in its wider sense, including FAL adult literacy classes), and ‘illiteracy’ means ‘not having been to school or having completed enough schooling’:

“These market vendors very well distinguish the formal schooling, which, they explain, means that you have to go to school and sit in a classroom with a teacher. Then every end of the year, you have to sit exams so that you can go to the next class until you reach the top of what you want to study. For them, school literacy was specifically for those who want jobs in offices.” (21)

And so, literacy is mainly for children (11): Nobody in the community counts you among the people who went to school! We do not want our children to be in the same situation. (23)

1.2 Literacy as recognition: Literacy carries with it recognition, usually in the form of certificates (62) and prestige:
if you have schooled literacy, many people in the community recognise and refer to you as one who has gone to school and they normally consult you on many different issues. (23)

So that being ‘illiterate’, unschooled, carries with it in their context some feeling of disgrace or discontent: “To these market vendors, the type of literacy and numeracy that counts is the school literacy.” (23) It’s this illiteracy that made us totally refuse to register before the beginning of this meeting. (44) I feel sorry for myself, because I could have been doing greater things than the ones I have done, if I had gone further with my education. (53)

‘Literacy’ in this formal sense is felt by these respondents to carry with it power - within the community and within the wider world. It will open doors, give them prestige. The literacy and numeracy practices they engage in do not carry such power, give them prestige - even though these practices help them to live a relatively fulfilled life.

1.3 Literacy and language: But the picture is more complex than this simple divide between ‘literate’ = ‘schooled’, and ‘illiterate’ = ‘unschooled’. First, there is a language element to it. “Peter says that he is literate in the Luganda language but says that he feels he is illiterate as he cannot read and write in English. He says the whole world knows he is illiterate”, and he went on to attend a Luganda adult literacy class. (4)

Different languages call for different literacies:

“These people use Luganda but in very rare circumstances or once in a while they speak some imperfect Swahili if the customer does not know Luganda. The Swahili is used rarely because most of the residents know Luganda. Some Sudanese who are hiring some rooms around … do not know the Luganda language. … They speak a few words of English - I heard, ‘thank you, no, yes, ok, good.” (20)

1.4 Literacy is formal: Further, ‘literacy’ for many of these people is clearly something formal. There are several references to the fact that these people ‘jot down’ something and this is felt not to be ‘literacy’:

“The mother said that she does not record often but when she gets some foodstuffs on credit, she jots down how much she owes to the supplier;
likewise when she gives credit, she jots it down in an exercise book.” (16)

Others say that “they jot down some of the things they buy but not systematically. They consider themselves as not well read.” (19) They ‘scribble’ something: For us, we scribble some of the things we buy and at times those we sell, but that ends in our market just to remind us and even trace some of the people we have extended credit facilities (23), implying that their writings are not legible as ‘literacy’ should be. And their writings are not very accurate: I also face a challenge of not having accurate records of the monies I keep (53), or as detailed as they should be (94) - not proper records. (4) Nor do they write or measure speedily: literate people measure very quickly (41); those who went to school are capable to pick up faster and are classified as literate, and the reverse is true. (75)

All of these traits (formal writing, accurate, legible, detailed, fluent) are thought to be characteristic of ‘literacy’. So that informal, slow and inaccurate writings are not (to them) ‘literacy’: of one trader, it was said that “she takes a while figuring it out but does it mentally, … counts the money twice or even thrice if you give her a big note.” (23)

1.5 The value of ‘literacy’: Nevertheless, they say that this formal literacy is valuable to them mainly for their income-generation and health activities. Cheating features several times in their discourses. One said that “[w] ith it, no one can cheat her in this business.” (4) Keeping records mentally is risky and I fear I might run into problems of being defrauded. (53) We need literacy to keep and maintain our detailed records, to read and count numbers, not to be cheated by some merchants and to keep our health well. (93-94) In this, they appear to be repeating what they have been told about literacy and numeracy learning. But at the same time, there is a contrary view expressed here:

Since I cannot read, write and calculate perfectly, it means I would not be able to transact business in the banks without being cheated once in a while. I am only lucky that we do not keep our money in the bank. (53)

She is arguing that using literacy at the bank would not save her from cheating but would instead lead to her being cheated; it is safer for her not to use that literacy.
But, whatever they say about valuing formal literacy, in fact most of them do not use this formal literacy (“reading, writing, calculating perfectly”) even when they possess these skills. Some feel that it is not necessary for them, they are happy with their informal practices of reading, writing and calculating. “She was pre-occupied with wanting to be able to meet the needs of her family and felt that she was doing this fairly well with her current level of literacy and numeracy”. Others “feel comfortable with keeping the record mentally.” (31)

2. Meanings of numeracy¹

Numeracy was seen by most of the people interviewed for the study as one of these four aspects.

- The formal schooled numeracy or mathematics
- Written numeracy
- Informal numeracy based and situated in contexts of their lives.
- Mental numeracy

2.1 Schooled numeracy tends to be seen to involve the four operations, that is, addition, subtraction, multiplication and division. Our case study subjects did not readily see other kinds of numeracy practices such as shape and space or time or the calendar as formal schooled numeracy. This formal numeracy was seen by interviewers as important and something to seek in an aspirational sense - that is, as a route towards future life chances or work and jobs or to keep control of their finances or to bid for contracts. Its uses in most cases were related to power. For example, the report of the carpenter said:

“However, the one area he identified himself as lacking skills is in being able to record his activities in writing and to produce documents in English that would enable him to tender for larger-scale furniture building contracts with local authorities or larger businesses.” (6)

Other subjects said that the use of formal practices might help them keep control of their finances. For example, in Hajara’s case study on oil palm farmers, one of the interviewees said that the ledger card could help them and their children to keep tabs on their earnings and avoid perhaps being cheated in the future.

¹ Contributed by Dave Baker
“Our greatest challenge is failing to understand the calculations involved. This is a business and we need to know how much we are earning and the rationale that KOPGT uses to reduce the inputs that were loaned to us. A concerned community member said, I wonder how my children will be able to manage this business when I pass away. They are not good at calculations, especially the ledger card, and that is my greatest worry. The good thing is that Mr. B- (KOPGT’s then manager) is still very loyal but what will happen after him? To tell you the truth, all we need is help in finances, i.e. calculations, and then how to ‘develop’ this money, because once farmers get their pay cheques, most of them simply spend it on drinking.” (39)

2.2 There was a clear link between formal numeracy and written numeracy practices. Several of the subjects mentioned the FAL courses where they learnt formal numeracy and learnt to record their calculations. Once again social and power relations are apparent. Detailed records they felt might help them from being cheated, yet there was in Tommy’s case on a farming family no evidence that they actually kept written records:

“We need literacy [written numeracy] to keep and maintain our detailed records, to read and count numbers, not to be cheated by some merchants and to keep our health well. But there are no signs that in fact they keep such records and it is clear that they keep their counting system and calculation by using no paper.” (56)

Others like Alice in Augustine’s case study tried to record the loan she received to buy a piglet. Her participation in an FAL class enabled her to do this. Again the link here was between written numeracy and FAL. However, she had problems with the size of the numbers involved in written form. So discrepancies were evident between fifteen thousand shillings and one hundred and fifty thousand shillings. Augustine describes Alice’s position in the pig farmer case study thus:

“Although the librarian verbally ascertained that each beneficiary of the piglet project received Ug. shs 15,000/= only, a reference we made to the written records with the librarian showed some discrepancies. We noted that over a half of the beneficiaries had signed for one hundred and fifty thousand Ug. shs (150,000/=) for buying a piglet in 2007.
Surprisingly, the librarian thought that all the beneficiaries had signed for Ug. shs 15,000/=, while for Alice, she thought she had received Ug. shs 20,000/=.” (72)

2.3 Engaging in numeracy practices that are not written is often called mental numeracy practices, in parallel with the concept of mental arithmetic from formal educational contexts. It is not meant to imply that written numeracy is not carried out mentally, which it clearly is. It is more that the whole process does not involve written recording and therefore involves a range of non-written numeracy practices and the memorising of both the processes used and the results of the numeracy practices. For example, the carpenter (3-7) designs furniture, plans the construction, and makes the furniture, all taking account of estimates of wood needed and costs. Further, in terms of mental numeracy practices, he is aware of material strength and aesthetics, longevity of his materials, decides and uses appropriate levels of accuracy in his measurements, estimates the final potential selling price and the profit he may make, etc. He makes no attempt to record these practices in writing. All these numeracy practices are situated in the context of being a carpenter. In Leah Hopp’s case study from Karamoja (22), it was clear that measurement of date and time to attend clinics were based on mental numeracy.

2.4 Peter’s activities as carpenter are clear evidence of Informal Numeracy Practices. The use of mental numeracy and informal numeracy practices was evident in nearly all the case studies. In Majanja’s semi-rural market traders case study, there was extensive use of non-standard measurement units, and the transactions from these were not always recorded. One trader commented that recording is for those people who are not self employed because they have to account to their bosses. For me I know my items very well.

3. Strategies used:
Most of the people interviewed saw themselves as ‘illiterate’ - but that did not stop them from engaging in literacy and numeracy practices. They adopted many strategies for this purpose.

3.1 Mediation: The most common strategy was to ask someone to help them - their children in particular, like the traders in the market (9-10)
and an oil palm farmer. (42) But they also used other family members and friends, even the researcher. (36)

“Though [Nakiru] says that neither she, nor her husband, can read, she does know of people that she can ask to help with any written instructions given by the clinic or from elsewhere. She cited Child Health Cards given out by clinics, on which dates are written for immunisations and follow-up visits as one of the examples of the circumstances in which she expects someone else’s assistance. Though she herself is not able to interpret the written instructions from these cards, she said, I am aware of others in our community who will assist me to follow these time-sensitive instructions.” (28)

But, although this could on occasion lead to failure - I could not find anybody to read the card so as to tell me when to return to the clinic for follow-up (28) - this did not always make them feel ‘dependent’. Many were insistent that we devise means (41), we find our own way; we have devised the cup method so that it helps us measure on our own(40). By observing and imitating others, they have achieved a measure of independence: I actually taught myself to farm through observation and creativity. (88)

3.2 Recognition of different texts: Through ‘creativity’, trial and error, through many different experiences, they have come to be able to ‘read’ some texts, to distinguish between different writings. Nakiru showed that

“she is able to identify the numbers one to five when written in the sand randomly. …and [wrote] them very well. … In terms of numeracy she recognises Ugandan coins and notes by their symbols instead of by their numbers; for example, she knows the two hundred shilling coin because it has a picture of a fish on it. … She knows the difference between the various denominations by the pictures and the colours of the paper.” (29)

Others use similar strategies:

I use different skills to recognise currencies, … as some of the tricks to identify and recognise various denominations of our currency. For example, the Ug. shs 100/= coin is bigger in size than Ug. shs 500/=, which also has a different colour as compared to the Ug. shs 100/= one. The
Ug. shs 1000/= notes is brownish and smaller than the Ug. shs 5000/= which is greenish. For … notes, she … uses symbols/pictures on them to differentiate one from the other … the Uganda cobs on the 1,000/= shillings note, the banana on the 10,000/= shillings note and the cow on the 20,000/= shillings note respectively…. I know our present Uganda shillings notes do not have a photograph or portrait of our president, so if someone gives me a note with a photograph, I will not accept it because it won’t be a Ugandan currency. (53-4)

“Patients learn to do the right thing by shape, size, colour and number of drugs per batch.” (73). They manage through recognising symbols, signs, shapes, colours, size of texts, pictures, photos, the location of items to purchase from their store. (36) Some, like Alice and Ann, were able to “understand the symbols and labels on her phone.” As the researcher commented, “Saving my telephone number in her phone demonstrated Ann’s ability to understand the symbols and labels on her phone.” (36) Some of them used different bags and cards (52) to sort the material they were using.

3.3 ‘Reading’ posters: At least two of them were able to deduce from posters important information. Ann, who although ‘illiterate’ was very aware of the posters she saw, said that she had been able to recognise plants that are safe to consume from a nutrition poster and how to prepare them (39); and Alice told the researcher, I learnt about brown salt when I saw a picture of a pig on the packet of salt. So I knew it must be good for pigs as well. (85)

3.4 Memorisation: One strategy which occurred more than once was for non-literate persons to learn by heart the important messages written on texts, especially medical information: “the patients who are unable to read are routinely helped to learn it by heart until it becomes part of them … those who can’t read, they … help them cram and memorise to do the right thing by shape, size, colour and number of drugs per batch, and educate them on the advantage of swallowing them at a specified time.” (70, 73) Sophia in her trading said that she has everything by heart. (91) These people are not dependent solely on literacy for their access to information, although such access is limited.
4. Using literacy and numeracy practices:

4.1 Informal literacy practices: Although most of these people described themselves as ‘illiterate’, unschooled or inadequately schooled, this did not mean they engaged in no reading or writing. Many of them possessed books and other papers of different kinds in their homes, and these were clearly well used. (81) As we have seen above, they ‘jotted down’ some writings, they ‘scribbled’, even if these were not very legible (they were, after all, almost exclusively for their own purposes, not for other persons). They made lists of items to be bought or acquired (4), even if these were ‘slow’ and ‘inaccurate’ (see above); they helped their children with their school work. (5) As the researcher said of Ann, although she said that she “could not write or read, … she performed some health-related tasks in which letters and numbers were used.” (34)

4.2 Informal (non-standardised) numeracy practices: As for numeracy practices, these were very common, often combined with their literacy practices - medicine instructions, keeping accounts of their livelihood activities, weighing children, and selling fruit and vegetables. In the clinic, “[t]he feeding of the patients combines literacy and numeracy factors together.” (73) “Alice uses her literacy and numeracy skills to operate within the KDP [the local community development programme].” (81) One of the fruit farmers said that “[s]he does not use standardised measures such as kgs, although she learned these in the FAL programme, but she calculates using sizes, heaps and cups.” I use shapes and feeling in the hand. (59)

It is remarkable the extent to which the case studies include the use of non-standard measures. In some instances, these caused conflicts in the tasks they were engaged in. For example, in Hajara’s case study on oil palm farmers, (35) the amount of palm had to be weighed by the truck drivers. The truck drivers brought scales with them. The farmers did not have scales and used non-standard measures.

“They have sewn a basket called ‘oluselo’ that helps them estimate the quantity of palm that they will be sending. Ten palm bunches if placed in a oluselo equal to 2 kg.” (37)
There was a potential conflict here between the two systems. The weight had to be standardised and established because it could affect the money the farmers were to receive. Of course, the standard scales were the accepted norm, and the power relations were clearly apparent with the farmers taking the subordinate role.

Another example of the use of non-standard measures and therefore informal numeracy practices is Majanja’s case study on market traders. Here

“They use heaps, plastic plates/cups, tinny plastic basins and five litre Jerri cans as measurements for what they sell. … When I inquired how she determines that this heap is enough, she said that she can tell by her eyes. But also during the low season, she usually puts about ten to twelve fingers (minwe) in a heap which she sells at Ug. shs 1000/=, or she puts twenty to twenty four in a heap which she sells at Ug. shs 2000/=. At times, she sells three fingers for Ug. shs 200/=. The same goes for sweet potatoes and cassava, but because these are larger, she puts much less but still measures by the eyes, depending how big the plants are.

…this market vendor sells the silver fish using a plastic cup. Each plastic cup she sells at Ug. shs 350/= . They use the plastic plates to sell bitter tomatoes, kikiga potatoes, tomatoes and egg plants. Then the small plastic basins and five litre Jerri cans (cut into ¾) are used to sell Irish potatoes. The matooke is sold as a bunch, a cluster or it is measured in heaps. The sweet potatoes and cassava are sold in heaps.

They do not use standard measures in kilos but they have created their own standard measures and their customers are accustomed to that. They got these from other traders who are in the same business as they are - except for the silverfish.”(11-12)

The cup usage for silver fish is itself an interesting issue. The husband decided to use a non-standard measure of a local cup to serve silver fish to avoid his hands smelling of fish when serving. Again social relations are an interesting issue in numeracy practices.
4.3 *Local and hybrid practices:* Most of these practices, especially the numeracy practices, are very local, indeed individualised - developed solely for themselves. Each of the roadside traders has her own ways of making such recordings as she needs; and while the measures they use have some similarities to each other, they are individualised, and they differ from the measures used by the fruit farming family. The literacy and numeracy practices of the carpenter and his wife are quite specific to them both. The oil palm farmers interviewed again have agreed to use a basket but each of these will be local. No-one else could use the recording scheme which Mama-Saa has developed for her own use.

But some of these practices are what may be called global. The child health cards used in the malnutrition clinic and the cards recording medicines to be taken provided by the HIV/AIDS clinic use more formal literacy practices. In particular, it seems that the literacy practices their children bring into the family from school are ‘global’.

What is particularly evident is the way such practices are sometimes combined into hybrid practices. The oil palm farmers used both the baskets and the weights given by the drivers who collect their harvest. Alice is a clear example of this: in her exercise book, she has copied sentences from her adult literacy class - sentences which are decontextualised, in the sense they do not come from her life experience. But she has also jotted (as we all do) in the margins the names and telephone numbers of some of her customers. And her local literacy practices at times relate to the more global practices of the librarian - but with the result on occasion of disagreements about payments.

4.4 *Non-transferable practices:* It is important that we note the nature of these informal literacies and numeracies; for some of these persons were able to engage in some forms of literacy practices but not in others. Our researcher noted that Mama-Saa

“would read her Bible in Lugbara, her mother tongue, very well, and do the same with the contents of her hymn book. However, when she was presented with another text not from the Bible or hymn book, she would not read them as well as she did with the Bible and the hymn books. Neither could she read handwritten texts.” (54-55)
Some of these practices are then quite specific, local and personal. They have been learned and developed to achieve certain purposes; they are not generalised or transferable. But others such as reading numbers on a clock or mobile phone or using health cards are more generic.

5. What literacy and numeracy practices?

5.1 What were the main forms of informal literacy and numeracy practices these women and men engaged in?

a) many related to their livelihood activities: designing, planning and making furniture and making tenders (4), engaging with the bank (5), handling loans from NGOs, self-help groups and the like (13, 14, 16); giving change and making sure they did not receive fake notes (15), writing receipts and ledger cards (43, 51), dealing with fertilisers and pesticides (66, 69); measuring lengths, areas, weights, amounts and volumes. (4 11-12, 37, 22)

b) many others in this group were embedded in health-related activities: keeping and reading health cards, prescriptions and medical instructions (28, 36, 66, 69), weighing children (74), referring to drug charts (71-2) and so on.

c) a third main use of informal literacies was in the field of religion (49, 51, 54-5): “She now loves reading religious books in Luganda.” (81)

A few miscellaneous practices were identified - local tax records (4), a certificate awarded by the local council. (62) Several respondents like Peter and his wife helped their children with their school work: “He helps his children with their school work in Luganda whilst his wife helps them with their English.” (5)

Such activities did not apparently create any demand for further literacy learning:

“While she expresses a desire to learn more about health, it was not clear that she sees this as directly related to any need to read or write. She was pre-occupied with wanting to be able to meet the needs of her family and felt that she was doing this fairly well with her current level of literacy and numeracy.” (31)
5.2 **Language:** As we have seen above, language was an issue for a number of them. Peter the carpenter was quite explicit - he needed English if he were to expand his business; he “joined the Functional Adult Literacy (FAL) classes but withdrew because the FAL classes were conducted in the local language (Luganda). This disappointed him because he had wanted the classes to be conducted in the English language where he could learn to read and write in English.” In the end, he joined a Luganda class. (4-6) “The front wall of the health centre contained numerous commercial advertisements and phone contacts. The handwritten advertisements were generally in English and Luganda” (36); and in the HIV/AIDS clinic, the posters were in English. (70) The roadside traders needed and could use a few words in both English and Swahili. (21) The oil palm farmers were faced with a written agreement (MOU) “either in English or Luganda depending on the farmer's preference.” (42) Alice the pig farmer wrote her notes in both English and Luganda. (83)

5.3 **Keeping accounts** was an issue, although writing accounts and records was felt to be cumbersome and not normally a priority. While some like Nakiru do “not keep any written records or use symbols regarding money” (30), others “jot down some of the things they buy but not systematically.” (19) This “could possibly be a cultural issue where the majority of the people in her community are not practising record keeping, and they feel comfortable with keeping the record mentally.” (31)

One reported that “[m]ost of the recordings are done by their children but the wife also does some simple recordings, especially credit given to customers, which they are able to follow up and interpret for their own use as and when needed.” (24) When this roadside trader “gives you back the correct change, she takes a while figuring it out but does it mentally, she does not write it down, but counts the money twice or even thrice if you give her a big note.” (24) Written accounts were thus normally done on an occasional rather than a systematic basis. Alice for example, in her sales of pigs, had only recently “adopted a culture of keeping records of all the prepayments to track the instalments made by different clients. She recorded the names of clients, amount paid and amount remaining, and their phone numbers. However, she did not put dates. She also did not keep records of any other thing she sold, though she exhibited a good
memory of any financial dealings she had been engaged in.” (86) One of the farmers said that she “keeps some records although not very consistently but they are adequate to give her guidance for planning purposes and also purchasing more stock.” (14)

What they said and what they did were different: as the fruit farmers said, *We need literacy to keep and maintain our detailed records, to read and count numbers, not to be cheated by some merchants and to keep our health well.* But [the researcher reported] “there were no signs that in fact they keep any such records, and it was clear from their counting system and calculations that they used no papers.” (94) “When I asked her if she records what she sells, she said she does not. Then I inquired how she knows how much she has sold. She replied, *Writing is not easy for me, it makes me tired.*” (15) Similarly, one of the roadside traders told the researcher that “at times she records but not consistently because it makes her tired to record. She commented, *Recording is for those people who are not self employed because they have to account to their bosses. For me, I know my items very well. But I tell my children to record, if I know that the whole weekend we (my husband and me) will not come at all to the market.*” (24)

But some have learned how to keep accounts and now do this. One of the roadside traders said that “she now records almost all her purchases and sales unlike in the past years. This is a result of becoming a member of the micro-credit organisations. The members are taught how to do basic recording before they access the loans and they are being monitored by the loan supervisors. She has … come to appreciate the importance of recording.” (18) The wife of Peter the carpenter “acknowledges that she can read and write in Luganda and a little in English. She says she keeps proper records especially of the retail shop business and says no one can cheat her in this business.” (11) But keeping accounts would seem to be a matter of local culture, not just a question of lack of knowledge and skills; it is a question of what is ‘normal’ in each particular context, it is a matter of ‘feeling comfortable’.

6. Tools of literacy and numeracy:

We noticed how these people used local artefacts as tools for their literacy and numeracy practices - not just pens and paper. They read a tape measure
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(6, 40), a clock (34), weighing scales. (35, 41) They used string (40) and a stick (40) for measuring. They used body parts like fingers for counting (92) and an arm for indicating the time of day. (27) For writing, they took old exercise books from school (16, 49, 55); they read words and numbers written on various surfaces such as posters and the outer walls of their houses. (48) They measured with their own cups (40) and made baskets to hold vegetables and fruit for sale. (41) They use “plastic plates/cups, tinny plastic basins and five litre Jerri cans [cut down] as measurements for what they sell.” (11) They pressed into service what they found around them and devised their own means of fulfilling their purposes. They were innovative, creative and effective.

7. Learning literacy and numeracy practices

In the LETTER programme, emphasis is laid on ‘informal learning’, all that learning, conscious or unconscious, which everyone does everyday from life’s experiences - informal, often untaught, haphazard as it is (see above …). We therefore asked, how did these people, most of whom had little or no schooling and did not attend adult literacy classes, learn the informal literacy and numeracy practices and the other practices they engaged in?

7.1 Schooling clearly had some impact on some of them but for others, it was inadequate:

“There is little evidence that he draws on the formal numeracy practices he learnt in school. The skills he uses in his work go well beyond those he might have been taught in his limited primary school and FAL participation; he said that they have been learned from his older brother and from his experience.” (6)

It was clear that there was a desire to learn. In some cases, this desire was linked directly to their work. For example, Peter the carpenter wanted his son and nephew to learn about wood working from him. But there was also the impression that some of them would like to be able to take the learning towards formal schooled numeracy and perhaps even towards qualifications.
7.2 Social learning: Most informal learning comes from social interaction:

“The environment they [the roadside traders] operate in helped them to use a mixture of learning methods but mostly informal and collaborative learning. They said that they learned through family members, older brothers and younger children, from friends; listening to some radio programmes, and informal conversations, and their activity-based practices were their sources of learning.” (25)

7.3 Family: Alice the pig farmer said that she “learnt from others including her husband.” (88) Family members of course seem to have been the most common - parents, husband or wife, siblings. One of the roadside traders reported that “she had an elder brother who would make her practise writing even after she had left school.” (19) Peter the carpenter also learned from his elder brother. (3) Others learned from their children: when “advised by KOPGT staff to try to learn how to sign for themselves … one of the farmers happily showed us how she has learnt the art of holding a pen and writing her name with the help of her children.” (42) *Because I have children that are of school-going age, I sometimes sit with the eldest that is in Primary four and learn how to write. I have now learnt how to write my name to help me with the signing in the bank.* (43)

7.4 Others: Some learned from friends (25, 43) and from neighbours. Some learned by observing other traders in the market. One mentioned the radio (25). NGO programmes were among the sources identified: “becoming a member of the micro-credit organisations” was important to one respondent: *the members are taught how to do basic recording before they access the loans.* (18)

7.5 FAL classes: For some, the FAL programme also helped. Alice said she developed her literacy skills in “the Kabubbu Community Library Functional Adult Literacy Programme. When I tried to confirm where she learnt the art of joining syllables, she said, *I learnt how to join syllables to form words and to join words to form sentences in the Community Library. I say this because when I came, I could only understand single letters and not combine them.*” (82) But for others, “[t]he FAL programme was more useful to them for its social and skills benefits than for the written forms of literacy and numeracy taught.” (62; see 28) Nakiru said that she would
be interested in FAL, not to learn literacy skills; what she wanted to learn “more about included: how to grow food, which kinds of food are edible for kids, how to care for family, how to use money properly if she sells charcoal – what is best to spend that money on, and how much money to save (as she now spends all she gets/makes).” (29)

7.6 Practice: There is a good deal of evidence that much of their learning was simply by trial and error. “The parents running market one said that they never went very far in formal education, both of them stopped way below primary seven but they can write legibly because they have been practising.” (19) Mobile phones were learned partly by asking others and partly by trying it out. Learning to cope with situations and to develop new practices is clearly for them a matter of trial and error with the help of others.

8. Social Relations and Power Relations in Literacy and Numeracy
Social relations were apparent in many of the studies. This could be in terms of opening doors to opportunities or in gender relations or even in proving status for those with qualifications. In a sense, it is not different from the gate keeping role that formal literacy and numeracy seem to play in Western societies. There are at least three examples given here.

Peter the carpenter could not bid for bigger contracts to make furniture unless he could submit a written tender in English. His chances of winning a contract did not depend on the quality of his furniture or the numeracy practices underlying his furniture. It depended on being able to write and submit a tender in the appropriate form.

In Majanja’s study on market traders, the wife said that the husband could get a better price when selling the same produce than she could. (12) Further, she said when discussing formal schooling that formal schooling prepares people for office jobs. People with formal qualifications are often seen as having a higher status.

“Nonetheless, much as these vendors at the semi-rural roadside markets stated that formal schooling is basically for those people seeking for white collar jobs, they also added that the formal schooling makes you become recognised wherever you are. … if you have schooled literacy,
many people in the community recognise and refer to you as one who has gone to school and they normally consult you on many different issues.” (19-20)

II: IMPLICATIONS FOR PRACTICE

The LETTER programme is primarily aimed at the training of facilitators in ethnographic approaches to teaching literacy and numeracy to adults in the context of international development programmes. The New Literacy Studies have on occasion been criticised for not making clear the practical implications of their findings for teaching. So we try here to face some of these challenges, by drawing out some of the practical implications of the findings of these (and the earlier) ethnographic studies for the practice of adult literacy and numeracy learning. The case studies were intended to help those who train adult literacy and numeracy facilitators to explore the everyday practices of the learners. So that it is necessary to ask at this stage - ‘so what?’ - what are some of the implications of these findings for the teaching of literacy and numeracy to adults? How can those who train facilitators use these case studies? There are of course implications for policy makers and programme providers as well, but our main focus here is with adult pedagogy.

In what follows, we have tried to draw out from the case studies their findings for pedagogy. A number of very clear lessons stand out from these findings. Our researchers themselves often drew these lessons, so we have as far as possible used their words.

1. Adult learners bring much to the class

The clear finding is that adult literacy and numeracy learners do not come to the classes as ignorant and inexperienced persons but they come bringing with them many things. To ignore these things is to ignore the experience and identity and aspirations of the learner; it is to treat them as tabula rasa, a blank slate on which literacy and numeracy have to be written, and written by the teacher, since the learners in this case are thought to be incapable of doing it themselves. The case studies are very clear: the learners bring much and are already in control of much of their own learning.
1.1 Literacy learners come with much experience of ‘literacy’ (even if they appear and indeed feel themselves to be non-literate) and even more experience of numeracy. A good example of this comes from Paddy’s section on ‘lessons from his findings’: being involved in this project, he said, had made him aware that “some people in rural areas use health literacy/numeracy practices in everyday health, regardless of their backgrounds.” (34) The people in our case studies engage with literacy tasks and activities all around them - in farming, in health clinics, in marketing, in their churches, in the voluntary groups they join. They read such items as clocks, posters and their own mobile phones. They know what being ‘illiterate’ means, and they have learned much (often unconsciously) about ‘literacy’ and ‘numeracy’ and about themselves from this engagement.

This is the fundamental issue. Many adult literacy classes ignore what the learners bring from outside the classroom; the new learning programme starts as if the learners know nothing. And many adult learners in such classes will deny that they know anything or that the practices they engage in are in any way relevant to what they are learning in class.

1.2 And they are still learning - including learning about literacy and numeracy. They therefore come engaging all the time in informal learning. This is a lesson which all teachers, in schools and higher education as well as adult literacy learning programmes, need to take account of - that their students are learning informally even while being taught formally; that each of the learners has his/her own learning styles; and that some of what is being learned informally is supportive and some is creating barriers to what the teacher is teaching. It is not just in the market that, “The environment they operate in helps them to learn how to read and write informally as they did their everyday selling and buying.” (24) They are learning from all those around them. As one of our respondents says,

   because I have children that are of school-going age, I sometimes sit with the eldest that is in primary four and learn how to write. I have now learnt how to write my name to help me with the signing in the bank. (42)

How does one teach something when the learners are learning different things from other sources? It will be helpful to identify some of those
sources and incorporate them into the lessons. So, one area of advice to adult literacy and numeracy teachers is to look around at the potential sources of literacy and numeracy, whether writing on walls, stories etc, and not just schooled text books. This shift in perspective is a key part of the LETTER training programme.

1.3 Learners come with their own meanings of the words ‘literacy’ and ‘numeracy’, and with a sense of values attached to different forms of literacy and numeracy - and these meanings and values vary. We must avoid assuming that all the adult learners think alike: “Even within the same community, literacy/numeracy implies different things.” (39) For many, ‘literacy’ and ‘numeracy’ mean formal school instruction leading to employment, and this is what these people expect from an adult literacy class.

“[The roadside traders interviewed] strongly believe that every person must go to school and sit in a classroom with a teacher if they are to learn how to read and write and pass their exams before moving to the next class. They are aware that this must continue until you understand that which you want to learn. They also believe that the reading and writing learnt from school was specifically meant for those who are to work in offices … education only benefits those who want to work in an office for white collar jobs, office work.” (21)

1.4 And they bring with them many different contexts, each with its own expectations of the usages of literacy and numeracy - which forms of literacy and numeracy are ‘normal’ and which are not normal in that context. For example, as these case studies show, the farm does not normally expect many if any literacy practices; a roadside market has different ‘normal’ literacy practices from a health clinic - the market does not assume formal literacy to be normal but some informal literacy and written numeracy practices may be useful on occasion; the clinic does expect formal literacy and numeracy:

“Information services in the health-care environment take a variety of forms including dissemination of information in anticipation of user needs or interests. Literacy/numeracy products available in the community show that many health educators need to understand their
communities better, in order to be able to identify information needs from a different perspective. Ethnographic studies demonstrate how this could be done.”(37)

However, the oil palm farmer project expects only the use of formal literacy practices - filling in forms and contracts and recording sales. But in other contexts, as we have seen, literacy practices are not ‘normal’; and teaching adults to keep accounts in a context where it is not ‘normal’ is likely to be relatively ineffective; the environment needs to change (Easton).

1.5 In particular, as our case studies show, with such a wide variety of backgrounds, each of our adult literacy learners brings with them their own literacy and numeracy practices - but the literacy and numeracy practices they engage in are in many cases different from those taught in school or adult literacy learning programme (for example, standardised measures, ways of calculation, modes of writing etc). This is one reason why the literacy learners deny they have any relevant experience - how can the plastic cups they use every day be relevant to learning about kilograms etc? How can their scribblings and jottings be relevant to the textbook approach to learning literacy? For they have learned in many cases that their informal local literacy and numeracy practices are thought by others to be inferior to the schooled practices. As we have seen above, many feel that their informal scribblings and jottings are not ‘literacy’ (see also Nabi et al 2009). As one researcher says, the case of Mama-Saa

“highlights the views of dominant literacy and numeracy in which people like her are considered to be deficient in certain areas and this makes her less satisfied with what she has managed to do in life.” (52)

An important message here is how to help the literacy and numeracy learners to overcome fears of formal ‘schooled literacy’, which some of them clearly felt they lacked.

The complexity of the relationship between schooled literacy and the ideologies associated with it on the one hand, and actual practices of literacy in people’s everyday lives, in their work places and communities, on the other hand, remains a central issue in applying ethnographic approaches in practice:
“We should not use the influence of dominant or formal literacy to dismiss people who can use their street-wise literacies to accomplish their goals in life, but rather encourage them not to give up in life and refrain from shunning programmes intended to improve the lives of the poor.” (55)

It is important to note that we are not setting up a single dichotomy and, like the schooled view, extolling one over the other; rather we are trying to help all participants, learners, teachers, trainers and policy makers, to appreciate the complexity involved at both levels, a more difficult point to put across.

2. All these elements of the learners’ background need to be taken into account in teaching

These local literacy and numeracy practices ought not be ignored; they need to form the basis for learning formal literacy and numeracy. Learning theory states that ‘all learning builds on prior learning’ - it does not start from scratch. “Peter has a wide range of existing numeracy skills and practices and he has some literacy skills and (through his wife) access to a wider range of literacy skills.” (9) So, rather than ignore these informal practices and impose new practices on the learners, it would be better to start with these practices and build on them:

“[E]mphasising formal literacy at the expense of embedded literacies that have helped many people survive for generations and generations should be discouraged. … Providing opportunities for enabling people like Mama-Saa to showcase their work … There is need to transform the approach we use towards teaching adult literacy and numeracy from a teacher-centred one to a learner-centred one based on the real life situations of the learners. Teaching such people should gradually progress from the known to the unknown, using the learners’ first language (mother tongue) and then moving to other levels of languages.” (55)

Encouraging the literacy and numeracy learners to demonstrate in class their existing
practices and moving from these to the new literacy and numeracy practices of the textbook would seem to be preferable to ignoring such existing practices.

3. Learners’ aspirations
This is particularly important, for the learners (as we see in the case studies) come with their own aspirations - and these will often go beyond the mechanical learning of writing and reading. Peter the carpenter

“... would also be very clear about what he would want to gain from such classes. His teachers would need to fit in with his skills and needs. Not to do so would probably mean that he would withdraw from such a programme as he did before. To fit with this position, his teachers would need to know what his current practices are and build on them, which is the approach being developed by the LETTER project as described in this book.” (9)

Or, as in another case,

“While she expresses a desire to learn more about health, it was not clear that she sees this as directly related to any need to read or write. She was pre-occupied with wanting to be able to meet the needs of her family and felt that she was doing this fairly well with her current level of literacy and numeracy. It would be important for literacy and numeracy programme designers to take into account such embedded literacy and numeracy practices so that what people come to learn is based on the literate ideas they already have. Literacy facilitators would therefore emphasise discussions on the experiences learners bring into their learning situation, so that the additional skills they will acquire can go a long way to improving their health. In that way, people like Nakiru would then reflect on their understanding of how health and literacy are related. At the moment, the connection between health, literacy and numeracy is unclear, so the teaching of literacy and numeracy in the context of healthcare needs to be anchored on what the local people know. These will help them link their current literacy and numeracy practices to what is being introduced to them in their literacy and numeracy classes.” (30)
The relevance of this for the teaching of literacy and numeracy in the FAL programme is also shown by our researchers:

“If Ann wished to improve her health-related literacy/numeracy skills so she could perform better in a health-care environment, it is not a good thing to take her through the FAL primer first. Learning to read pages in the primer will not really motivate Ann when she wants to read health documents.” (36)

For many, attending a literacy class is tied up with other goals which may be more important than reading and writing. Rather than literacy, one respondent says,

_I would like to get skills of adding things, subtracting things and communicating easily with people I work with and for._ (54)

“The FAL programme was more useful to them for its social and skills benefits than for the written forms of literacy and numeracy taught.” (60)

4. Uncovering the literacy and numeracy practices of the learners and their communities

It is therefore important for the adult facilitator to learn about the learners and the communities they come from - and especially to discover the literacy and numeracy practices they engage with.

The first step in this process is for the facilitator to identify such practices which will be very local. This is not always easy - which is why the LETTER training programme was developed. Simply asking the learners about their literacy and numeracy practices, while useful and indeed necessary, is not enough, for it will not provide all the answers; most of the learners will not be conscious of these practices or will not see these informal practices as ‘literacy’ or ‘numeracy’ - they will only think about formal literacy and numeracy as being relevant.

We suggest that the best way is for the facilitator to survey by observing the local literacy and numeracy practices and to do that not on their own but _with the literacy and numeracy learners_. Literacy and numeracy learners are fully able to find out the practices they and other members
of their community use every day - making the invisible visible. They can bring in texts from their own homes or those of others they know. They can even, with their mobile phones, photograph the texts around them in their communities and bring these into class to show to other learners.

Discussion in class of these practices is essential. What the learners have to say about these local literacy and numeracy practices will be most revealing - and will engage the learners with their own learning. There will be much sharing of experiences, much peer learning - not all the learning in an adult literacy class needs come from the facilitator. And it will lead to critical reflection. Critical reflection does not depend on learning literacy or numeracy first; literacy and numeracy learners can be and often are critically reflective right from the start.

5. Numeracy teaching to adults

The work on this project has led us to draw implications for training of adult literacy and numeracy facilitators. Facilitators of adult numeracy need to understand three vital educational components to make them effective teachers of adult numeracy. And cutting across the three educational components of curriculum, pedagogy and assessment are social components, which are the vital facets of the role of context for numeracy, the values sited in numeracy practices, and the social relations and power relations in numeracy.

5.1 Curriculum: Facilitators need to know what it is they are helping their learners to learn. This is where it is vital to understand that numeracy is not the autonomous set of skills and understanding that it is usually seen to be within education, by policy makers and in society at large. It is clear from the case studies in this project that numeracy is always sited in contexts and within social and power relations.

Following Street (1984) and Street, Baker and Tomlin (2005), we see numeracy as ideological. Understanding this can help facilitators understand the importance of context in deciding what to teach, the importance of linking what they are teaching to their learners’ lives, the values within the content and context, and the power and social relations sited in that content and context. We can see the importance of context

2 Contributed by Dave Baker
and values in the problem that was set out earlier in Chapter 1 on the “Number of Birds in a Tree” - problems where the skills needed to solve the problem and where the answers arrived at both depended on the values of the people involved. In terms of power relations, the insistence in the oil palm case study by the truck drivers of the use of standard measures of weight superseded the methods used by the farmers themselves. The farmers had to accede to the standard measures. The power relations in numeracy were even more apparent for Peter the carpenter in his case study. He could not submit a bid to make local council furniture because he could not produce a written tender. In this case, written numeracy and literacy practices were the only acceptable way of submitting a tender. He had to accede to this requirement. The power relations here are clear and up front.

These examples reveal the need for adult numeracy facilitators, wherever possible, to select content and contexts that are appropriate for their learners and to reveal the power relations and values to the learners, so that they become fully aware of what they are learning and why and the social relations surrounding them. This shift of attention away from the autonomous model of numeracy that occurs in most adult numeracy curricula towards an ideological one is arguably the most important implication of the numeracy aspect of this project for the training of facilitators. Indeed, this shift seems to be the most difficult for facilitators and learners to take and the one that we have seen the most resistance among facilitators, learners and policy makers.

Further to this, there is a tendency in most adult numeracy curricula to see numeracy as restricted to number and the four operations around this. As we have discussed earlier in this book, we see numeracy as much wider because, as the case studies in this book show, this breadth is appropriate for the needs and lives of many adult numeracy learners. Facilitators need to know the full range of areas of numeracy that they need to support their learners; that is from number and number operations to measures of time, length, weight, money et al, to shape and space, to data handling and problem solving.

5.2 Pedagogy: The single most important aspect to raise here is that facilitators need to build on what numeracy their learners already know
and can do and what numeracy they already do, and what they want to be able to do.

In many of the case studies, it is clear that the adults involved are already active participants in numeracy practices in their lives. The market traders can handle money with little difficulty. Peter the carpenter can use angles, lengths and money in a way that ensures he makes saleable furniture. Mama Saa can handle the Rural Church Funds effectively. Alice in her project with pigs is making a real and effective go at managing and making money out of the microfinance project she is working with. David and Sophia also manage their selling of produce.

However, in several of the cases the people involved clearly wanted to be able to take their numeracy practices further. In all these cases, the adults involved were highly skilled in what they were doing, but in each case wanted to take their skills further. In the view of this project, facilitators must not ignore what the adults can do and start their teaching from scratch – a practice evident in many adult numeracy classes around the world. They should build on what their learners already know to teach them what they want to know. Taking the latter as an example, David and Sophia already managed the sale of produce but wanted to learn to record their financial transactions to avoid being cheated. This then is what the facilitator must direct their teaching towards.

However, the question remains how would the facilitators know what their learners can do and are doing at the start and what they want to be able to do? And this is what the ethnographic case studies as outlined in this book are designed to do. It might be a tall task for facilitators to find out what their learners can already do and what they want to learn, but it is in the view of this project a vital first step to enable the facilitators to become more effective teachers of adult numeracy - and it can be done when the literacy and numeracy learners lead the way.

5.3 Assessment: Knowing what their learners are already doing is closely linked to assessment.

An ethnographic style approach to teaching numeracy has within it a built-in view that assessment is concerned with finding out what learners
can do within an appropriate context for the numeracy practice being assessed. In a sense, the learners of course are an embodiment of what they can do in numeracy and other things. Finding this out is clearly a significant issue. Traditionally this is done formally by pen and paper tests or informally in class through observations of the learners as the teaching progresses. However, such formal tests cannot reveal if learners can use the knowledge, skills and understandings in solving problems in context. In the case studies above, there is therefore no place for a formal paper-based skills test. The assessments instead have required observation and discussion and interactions with the learners. These are time-consuming processes but they are vital if facilitators are to use the main principles that have emerged from the project. These are that all content must be learnt in context and all teaching must build on what learners can do.

In the case of Nakiru in Karamoja, a programme aimed at teaching her to use formal written calendars and to tell the time using clocks will assess her learning by observing her use of them in meeting her appointments at the health clinics. Similarly, a programme designed to teach Peter the carpenter to write written tenders for work will be assessed by his completion of such written tenders. So assessments which are part and parcel of the processes of teaching adults numeracy themselves have to be sited in context with appropriate values and an awareness of social and power relations.

6. Training of adult literacy and numeracy facilitators
These studies show that many people come to adult literacy classes from contexts where they are already engaged in their own reading, writing and especially numeracy practices. These literacy and numeracy practices are in many cases local, informal and different from those taught in the adult literacy learning programme such as standardised measures, standardised ways of calculation, formal modes of writing etc; and these practices have been learned informally and often unconsciously.

Rather than ignore these informal practices and impose new practices on the learners, it would be better to start with these practices and build on them, even strengthen them rather than ‘correct’ them for being ‘wrong’. But it will also be necessary to add to them new ways, more formal ways of doing the same practices. As one of our researchers wrote:
“We are strongly of the view [on the basis of the research conducted in the LETTER project] that emphasising formal literacy at the expense of the embedded literacies that have helped many people survive for generations and generations should be discouraged. There is need to transform the approach we use towards teaching adult literacy and numeracy from a teacher-centred one to a learner-centred one based on the real life situations of the learners. Teaching such people should gradually progress from the known to the unknown, using the learners’ first language (mother tongue) and then moving to other levels of languages.” (55)

The first step surely is for the facilitator to identify such practices which will be very local. Simply asking the literacy and numeracy learners, while useful and indeed necessary, will not provide sufficient answers, for most of the learners will not be conscious of them or will not see these informal practices as ‘literacy’ or ‘numeracy’. Perhaps the best way is for the facilitator to survey ethnographically the local literacy and numeracy practices. And this means that the literacy and numeracy facilitators need to be trained

a) how to survey ethnographically (along the lines of this book and the others in this series); and

b) to be critically reflective

Exploring the facilitators’ own literacy and numeracy practices: One way to do both of these tasks at the same time is to explore with the facilitators their own literacy and numeracy practices - what they do, why they do it, could these be done in any other way? Once again, as with the literacy learners, we need to start our training of trainers programmes where they (the facilitators) are, to build on what they already do. All new learning builds on prior learning; new learning for the facilitators needs to build on what they already know and do, so as to help them become more effective teachers in adult literacy learning programmes - for that is what we all want and need. And in exploring their own literacy and numeracy practices, the facilitators will increase in critical reflection.
7. Taking a wider perspective

“By engaging in reading and/or writing in different local contexts such as in communities and in workplaces, learners come to terms with a variety of issues that they are not necessarily conscious of learning explicitly” (Street 2015). The case studies above reveal this clearly. Several of our respondents had limited school experience but nevertheless have created relatively successful businesses, in some of which they involved their children from a young age. The key issue is that the reading and writing associated with these activities were mostly learned on the job. Indeed, the school literacy and numeracy were not necessarily all that helpful, issues that can well be applied to learning of literacy and numeracy practices in other contexts. The complexity of the relationship between schooled literacy and numeracy and the ideologies associated with them, on the one hand, and actual practices of literacy and numeracy in people’s everyday lives, in their family lives, work places and community, remains a central issue in applying the ideas of the New Literacy Studies in practice. We are not setting up a single dichotomy; we are not, like the schooled view, extolling the informal over the formal. Rather, we are helping participants to appreciate the complexity involved at both levels, a more difficult point to put across in either context.

An important message here, which we have found in other contexts, is how to overcome the fears of many people of the formal ‘schooled literacy’ which they felt they lacked. One answer is that, by working in a collective atmosphere, the literacy and numeracy learners can learn how to support others to acquire the skills they had previously taken for granted. The production by the learners themselves of written material that could itself be used as learning materials (what is referred to as ‘Learner Generated Materials’ (LGM) - see Carter 1999) has been shown in other contexts to be particularly effective. This has included creating wall newspapers, writing stories and recording the day’s experiences. These are not ‘post-literacy’ activities but essential elements of any basic adult literacy and numeracy class. As our case studies show, it is not difficult to look around at the potential sources of literacy and numeracy, whether writing on walls, oral stories, market practices etc, and not rely solely on the provided schooled text books. This shift in perspective involves a powerful ideological shift in contexts when the schooled perspective is being presented as the only
one that matters. Such diversity is a key outcome of the findings presented above.

From a broader perspective, such a view also leads us all - teachers, teacher trainers, academics, programme planners and policy-makers - to look at the wide array of reports and findings now available across the world, and to identify ways in which literacy is presented as social practice. Such studies range from South Africa (Prinsloo and Breier 1997) and India (Nirantar 2007) to Pakistan (Nabi et al 2009, Ethiopia (Gebre et al 2009) and to Brazil (Castanheira et al 2015); they include ethnographic studies of women’s literacy (Robinson-Pant 2004); and they embrace studies which recognise that children’s literacy is closely associated with family learning and out-of-school experience, workplace literacy and numeracy practices, and everyday family and community practices. The importance of such a shift in assumptions about learning remains to be fully recognised by international agencies – and this too is a step that the present volume can help us to make. We are not simply involved in ‘training teachers/facilitators’ but also helping policy makers, programme writers and donors to see this more complex picture.

References


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George Openjuru

We hope this book will prove valuable for adult literacy programmes in Uganda, in Africa and more generally.

It brings out clearly the need to recognise some of the informally learnt literacy and numeracy practices that are sustaining the majority of the people who are poor and who did not have time to acquire the dominant language reading and writing and formal numeracy skills. While these informally learnt skills or “jottings” may not facilitate access to the bigger markets, as in the case of Peter the carpenter, they nonetheless facilitate comfortable livelihoods’ practices at the household level. We aim to make a succinct and compelling contribution to the recognition of what are in effect ‘marginalised’ literacy and numeracy practices and their informal learning styles, as a good case for the promotion of lifelong learning and not lifelong schooling/education.

We hope that this simple book is going to make a great contribution to adult literacy work.
This is the third book in the LETTER series and the fourth in ethnographic studies of adult literacy and numeracy in developing countries.

LETTER (Learning for Empowerment Through Training in Ethnographic Research) is a programme aimed at improving the effectiveness of adult literacy and numeracy learning programmes in development by assisting programme-makers and trainers of adult facilitators to understand different approaches to literacy and numeracy. It is a small-scale programme run by Uppingham Seminars (UK) with local partners.

All the books are free and available by download.

The first book arose from the LETTER programme in India - it was compiled and published by Nirantar (Delhi) who hosted the programme: Nirantar 2007 Exploring the Everyday: ethnographic approaches to literacy and numeracy, available on http://www.nirantar.net/index.php/page/view/88


This book is published by Uppingham Press (Bury St Edmunds) and is available for free distribution in .pdf format from info@uppinghamseminars.co.uk or by download from …

An additional volume in this series is Hidden Literacies: ethnographic studies of literacy and numeracy practices in Pakistan, Nabi Rafat, Alan Rogers and Brian Street, 2009, also published by Uppingham Press and available from http://www.balid.org.uk/wp-content/uploads/2012/12/HiddenLiteracies_all_02.pdf

We wish these books to be widely circulated and read. We hope there will be more in the series, including some ethnographic case studies of adult literacy and numeracy facilitators. Our aim is to enrich adult literacy and numeracy learning throughout development contexts with a view to reduced poverty and inequality and conflict.

Uppingham Seminars