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Abstract

At independence in 2011, and with devastated infrastructure, South Sudan faced two key educational challenges: low teaching capacity, and the need to deal with the impacts of physical and linguistic oppression.

This research explores the potential for Interactive Radio Instruction (IRI), when seen through a lens of Freirean pedagogy, to turn these challenges into opportunities and work to meet them.

Using qualitative techniques, including interviews and class observations, a case study of the ‘Speak Up!’ (SU) English language programme is used to investigate to what extent an IRI programme can facilitate participant (learner and teacher) skill and knowledge development, and community engagement.

It is found that IRI is an effective and attractive method of mass education, but is limited dramatically by post-conflict contexts which create many logistical problems that often lead to a move to stored media.

Learners can improve their English language ability whilst gaining knowledge of, and discussing, key messages. This creates the opportunity for them to raise their critical consciousness.

However, the realisation of this opportunity largely depends on the capacity of the teacher, and this represents the key finding of the research. IRI and Freirean pedagogy both recognise the teacher as a facilitator figure, but in the case of SU, where there is mixed class ability due to targeting issues and a high content level, there is a shift to a more overt teacher role. This can create a gap between the required balance of teaching and facilitation, and the actual balance in practice.

The wider community can benefit through indirect learning when IRI programmes are broadcast live and have a platform for discussion. However, a move to stored media reduces the potential benefits for this group.
Ultimately, it is found that IRI has huge potential to turn challenges into opportunities, but in meeting them, the teacher must be seen as central. The resultant key recommendation is building teacher capacity, moving to a dual-centric learner-teacher curriculum. This can unlock benefits, not just for teachers themselves, but importantly for learners in their classes.
List of abbreviations

<table>
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<th>Abbreviation</th>
<th>Description</th>
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<tr>
<td>AES</td>
<td>Alternative Education System</td>
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<tr>
<td>AET</td>
<td>Africa Educational Trust</td>
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<td>AFP</td>
<td>Agro-Forestry Programme</td>
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<td>ALP</td>
<td>Accelerated Learning Programme</td>
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<tr>
<td>BALP</td>
<td>Basic Adult Literacy Programme</td>
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<tr>
<td>CGS</td>
<td>Community Girls Schools</td>
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<td>CPA</td>
<td>Comprehensive Peace Agreement</td>
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<td>FM</td>
<td>Frequency Modulation</td>
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<td>IEC</td>
<td>Intensive English Course</td>
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<tr>
<td>IRI</td>
<td>Interactive Radio Instruction</td>
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<tr>
<td>MOI</td>
<td>Method of Instruction</td>
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<td>MT</td>
<td>Mother Tongue</td>
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<td>NGO</td>
<td>Non-Governmental Organisation</td>
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<td>P</td>
<td>Primary</td>
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<tr>
<td>PEP</td>
<td>Pastoralist Education Programme</td>
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<tr>
<td>ROLE</td>
<td>Research and Open Learning</td>
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<tr>
<td>SPLA</td>
<td>South Sudan People’s Liberation Army</td>
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<tr>
<td>SSIRI</td>
<td>South Sudan Interactive Radio Instruction</td>
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<td>SU</td>
<td>Speak Up</td>
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<tr>
<td>USAID</td>
<td>United States Agency for International Development</td>
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In 2011, South Sudan became its own country. That 99% of its population voted for this new reality is testament to the will of its people to be South Sudan, as much as it is not to be Sudan.

Southern Sudan\(^1\) was affected by violent conflict for the majority of the period following Sudanese independence. The ‘Anyanya’ war fought against the north from 1956-1972 was followed by eleven years of peace, but led to further conflict from 1983 up to the signing of the Comprehensive Peace Agreement (CPA) in 2005 (Kevlihan, 2007). South Sudan, now ‘post-conflict’ in relation to its war with Sudan, still suffers from conflict at the border and is deeply affected by internal fighting (Craze, 2013; Reeve, 2012).

As a result of a long history of war and outside interference, by the British and Khartoum, South Sudan was left with many tremendous challenges, not least in education. Years of conflict and neglect resulted in South Sudan needing to rapidly educate its population on a large scale, particularly adult learners and older youth who either missed out on or dropped out of education (Power, 2012); this all in a permanently fixed language of English. There are generally low levels of infrastructure, particularly in communication and transport (Kim et al., 2011). As well as a lack of school buildings, resources are scarce and there are multiple disparities in regional provision of education (ibid.; Brown, 2006).

Providing this education is, however, set in a post-conflict environment that is scarred by two major challenges. There is firstly, low teaching capacity and secondly, a need to shake off the impacts of historical physical and linguistic oppression.

With regards to the first, there are issues with both the quality of teaching and quantity of teachers. It is estimated that 90% of teachers are competent in Sudanese Arabic whilst just 20-30% have rudimentary English skills (Luswata, 2006; Leigh, 2008). Generally speaking, of the current teachers available, almost 90% are either

\(^1\) Southern Sudan is used to describe South Sudan before its independence in 2011.
untrained or undertrained (Kim et al., 2011; Leigh, 2008). At the current rate however, ‘it will take over a century for South Sudan to train enough teachers for today’s population’ (ibid.: 374).

On the whole, Leigh (2008: 65) notes that teachers, ‘despite their limited capacities and high absenteeism do hold classes’. Furthermore, the Department of National Languages (2009) feels that well-trained teachers can make up for a lack of resources, thus emphasis should be on teacher training, rather than simply printing textbooks.

Concerning the second challenge, South Sudan is recovering from the impacts of historical physical and linguistic oppression. Both teachers and learners have not only been constrained by multiple switches in language policy, with concurrent restrictions in educational opportunities, but must now rapidly learn the official language of English in order to be able to fully engage with independent South Sudan. Otherwise, there is a danger that the old oppression of Arabic-speaking Khartoum is replaced by a new oppression led by elite South Sudanese English speakers. It is not necessarily that to be South Sudanese is to speak English, but speaking English is certainly part of the process not to be Sudanese. Learning English can be considered part of the process of true individual and national liberation from this oppression.

Additionally, there is a range of various curricula in use, and there is an urgent need to finalise a unified curriculum, including strong life skills and civic elements to contribute to peace-building in the post-conflict context. There is also an increasing desire for formal qualifications, which could open doors to other training and opportunities that were lacking pre-CPA (Marshall, 2006).

1.1. Alternative Education Systems

Given this educational environment, the Alternative Education System (AES) is being relied upon to increase learning opportunities, particularly for those adults and youth who have either dropped out of school or missed out altogether. Interactive Radio Instruction (IRI) constitutes one of the seven elements of the AES [Box 1.1.].
Elements of the AES

Accelerated Learning Programme (ALP)
Community Girls Schools (CGS)
Basic Adult Literacy Programme (BALP)
Intensive English Course (IEC)
Interactive Radio Instruction (IRI)
Pastoralist Education Programme (PEP)
Agro-Forestry Programme (AFP)

Box 1.1. Elements of the South Sudan AES.

The World Bank (2005) identifies that IRI is held to be particularly useful in two contexts. Firstly, it can provide education on a large scale where it is otherwise nonexistent or of poor quality, particularly as part of an AES. Secondly, it can serve hard to reach and out of school populations, as a result of widespread radio ownership (Mayo, 1999).

1.1.1. IRI

From its inception for a Nicaraguan mathematics initiative in 1972, IRI has concerned

‘interactive lessons in which an external teaching element, delivered by a distant teacher through the medium of radio or audiocassette, is carefully integrated with classroom activities carried out by the classroom teacher and learners’ (Dock and Helwig, 1999: 7).

The class can benefit from a ‘cluster of techniques...designed to promote true understanding and long-term retention’ (Friend, 1998: 107). Operationally, IRI has potential benefits for the learners in the classroom, the teachers, and communities at large who can also listen when the lessons are broadcast.

The basic format of an IRI lesson is a broadcast directly instructing the learners by radio, followed by a post-broadcast portion conducted by a classroom teacher, who
follows a written guide (ibid.). In its history, subject matter, time allocations and relative emphases have all changed. Projects have run across the world, covering an array of subjects, from mathematics, through language instruction, to health and beyond (World Bank, 2005).

IRI is predicated upon a number of pedagogical principles, including active, structured and distributed learning, connecting knowledge, diverse activities, reinforcement and uses a teacher-as-facilitator. In most cases, IRI follows the national curriculum for a particular subject, but where this does not exist, such a programme can form part of the curriculum development process (ibid.).

At least conceptually, IRI English language programmes address both of South Sudan’s key challenges. On the one hand, they provide a route through which teachers can gain training in English and pedagogical skills, whilst they are supported in delivering their teaching (Ministry of Education, Science and Technology, 2006). On the other, language training and the key messages carried in broadcasts can contribute to overthrowing the prevailing oppression.

1.2. Freirean pedagogy

These two key contextual challenges can also be seen as tremendous opportunities when viewed through a lens of Freirean pedagogy; South Sudan is an environment where teacher and learner by necessity must learn together in a bid to understand and overturn the impacts of both physical and linguistic oppression. Thus, Brazilian educator Paulo Freire (1996) and his perspectives on critical pedagogy in Pedagogy of the Oppressed offer a useful framework against which to interrogate the potential of IRI to turn South Sudan’s post-independence educational challenges into opportunities, and thus work to meet them.

Application of Freirean pedagogy is in line with its exploration in other contexts, and acknowledges a recent and growing realisation of its multi-disciplinary applicability in contemporary Africa (Thomas, 2009).
Freire advocates learning predicated upon a dialogical relation such that the teacher-learner dichotomy is dissolved to a class of teacher-learners, in a wider movement from the ‘banking’ concept of education to a more libertarian, ‘problem-posing’ one [Box 1.2.]. Learning should become a dialogue around objects rooted in indigenously generated themes, in an environment of mutual learning, no longer seeing teachers as depositors, who deposit knowledge in the learner depositories, where the action of learners is restricted to ‘receiving, filing, and storing’ (Freire, 1996: 53). This dialogue is part of a process of liberation, where people discuss, understand and critically analyse reality, equipping themselves and feeling ever more obliged to transform it - the development of critical consciousness.

**Freirean pedagogy**

**Banking concept of education**
Depositors (teachers) deposit knowledge into depositories (learners), in the form of communiqués rather than communication. Learners patiently receive, memorize and repeat, whilst ‘knowledge is a gift bestowed by those who consider themselves knowledgeable upon those whom they consider to know nothing’ (Freire, 1996: 53).

**Problem-posing concept of education**
Teachers present material to learners for their consideration, and then reconsider their earlier considerations based on the learners' expressions of their own. A dialogical approach reconciles the teacher-learner dichotomy, such that they both 'become jointly responsible for a process in which all grow' (ibid.: 61). Education becomes reflection and action upon the world in order to transform it.

**Freirean pedagogy in post-conflict societies**
In the ‘banking’ concept of education, learners are passive recipients of deposited knowledge and tend to 'adapt to the world as it is and to the fragmented view of reality deposited in them' (ibid.: 54). In a post-conflict context, this is problematic in two key ways. Firstly, it encourages the acceptance of the past, the impacts of historical oppression, and the culturally held perceptions of the oppressors, potentially inhibiting peace-building and reconciliation. Secondly, it accepts the control and legitimacy of new leaders, moving into the future. Indeed, post-conflict and in the interests of development, it is important that learners 'perceive their state
not as fated and unalterable, but merely as limiting - and therefore challenging’ *(ibid.: 66).*

A movement to the problem-posing approach stimulates learners to truly perceive, understand and critique the present in order to change the future. Indeed,

‘whereas the banking method directly or indirectly reinforces men’s fatalistic perception of their situation, the problem-posing method presents this very situation to them as a problem’ *(ibid.: 66).*

In other words, with a critical approach, fatalism gives way to perception and as a result, learners can become critically objective of reality. With a consciousness of reality comes a consciousness of the ability to transform that reality; a process over which they have control. In Freire’s words, this is conscientização. As a result, as learners are increasingly posed with and critically analyse problems relating to themselves in the world, they ‘will feel increasingly challenged and obliged to respond to that challenge’ *(ibid.: 62).*

**Box 1.2. Freirean pedagogy.**

*Source: Author; Freire (1996).*

In a context like South Sudan, oppression does not die with democracy. The impacts of that oppression remain and while its people may be ‘free’ and ‘independent’, Freirean pedagogy can conceptually be seen as a facilitator of the transformation of the impacts of oppression. Acceptance of the banking concept of education can indicate either misguided policy or a ‘mistrusting of people’, reverting to a ‘mechanistic concept of consciousness’ *(ibid.: 60; 60).* This is potentially limiting for development, given the need for praxis and action in reconstructing, or constructing, a country.

**1.2.1. Aims of IRI and relation to Freirean pedagogy**

In providing education where it otherwise might not exist, and reaching hard to reach populations, IRI is a tool that can increase access to education, particularly in post-conflict settings. However, this is only of benefit when the quality of that education is fit for purpose. As such, IRI’s key concern has always been improving quality by way
of innovative practice (Dock and Helwig, 1999). There is in fact more empirical evidence of the effectiveness of IRI in enhancing quality than access (World Bank, 2005). Whilst there is evidence of IRI programmes producing learning gains in even the most difficult situations - for instance in Zambia where there were no formal schools or trained teachers (ibid.) - the literature suggests that benefits and constraints to the learners, teacher and communities are highly context dependent.

Like Freire’s starting point for organising programme content is ‘the present, existential, concrete situation, reflecting the aspirations of the people’ (Freire, 1996: 76), IRI programmes are ideally grounded in indigenously generated themes, building on local stories, knowledge and educational requirements. In this way, radio-based lessons are created, with associated resources and activities that form a ‘single, integrated instructional package’, with the classroom and distant teachers combining to deliver an engaging lesson (ibid.; Friend, 1998: 108).

IRI language programmes aim to support teachers in delivering lessons, whilst enhancing pedagogical skills, such that teachers and learners learn through the radio together (Potter and Naidoo, 2006). They aim to improve language skills, at the same time as stimulating discussion around the content of broadcasts, which often draw on key messages concerning life skills, history or culture. It is only in this way that

‘people develop their power to perceive critically the way they exist in the world...they come to see the world not as a static reality, but as a reality in process, in transformation’ (Freire, 1996: 64).

The efficacy of IRI programmes, however, varies on two grounds; programmatically, in terms of design, logistics and context; and operationally, which depends to a great extent on the quality of the teacher. The debates around each of these, and more thorough discussion of the benefits of IRI to learners, teachers and the wider community, are explored in the literature review.

Ultimately, and at least conceptually, the IRI approach matches Freirean pedagogy in attempting to transform South Sudan’s two key educational challenges into opportunities, and work to meet them [Figure 1.1.].
Firstly, stimulating teacher-as-facilitator and teacher-learner learning has the potential to make up for low teaching capacity, simultaneously developing teacher and learner ability:

‘The teacher is no longer merely the-one-who-teaches, but one who is himself taught in dialogue with the students, who in turn while being taught also teach. They become jointly responsible for a process in which all grow’ (*ibid.*: 61).

Secondly, encouraging language learning through dialogue and discussion around key messages helps teachers and learners develop new language skills and a critical consciousness, contributing on both counts to liberation from the impacts of oppression.

### 1.3. Rationale

Here, IRI and its potential for transforming South Sudan’s post-conflict educational challenges into opportunities, and work towards meeting them, is explored through a
case study of a 2011-present Africa Educational Trust (AET)-supported IRI programme for English language learning, ‘Speak Up!’ (SU). It is investigated to what extent the programme facilitates participant (learner and teacher) skill and knowledge development, alongside community engagement.

By exploring the benefits and constraints of the programme to learners, teachers, and community members, perspectives are gained on the impacts of an IRI programme at these levels. This adds to the literature on: firstly, whether IRI is an effective way to both negotiate a lack of and develop teaching capacity; and secondly, whether IRI is an effective way to rapidly spread English language skills to an older population, whilst contributing at a personal and community level to the discussion of key messages and raising of critical consciousness.

This research builds upon literature on IRI and the use of radio, exploring its programmatic and operational benefits and constraints to its audience. This is the first known study to draw a parallel in such a way between IRI and Freirean pedagogy, and certainly in the South Sudan context. The research fills a gap with regard to IRI’s potential to turn challenges into opportunities when aligned with this pedagogy. Ultimately, lessons are learned as to whether IRI might be an effective educational solution in other similar settings, or indeed, should be pursued in-country as the development response continues.
Literature review

Whilst low educational and teaching capacity is apparent through the lack of resources, teachers and training, the origins and impacts of physical and linguistic oppression require interrogation. After this, IRI is explored in two respects: firstly, programmatically, concerning the use of a radio itself and other issues; secondly, operationally, unpicking the conceptual and real benefits and constraints to learners, teachers and communities. Finally, IRI in action in South Sudan is investigated, drawing on a US Agency for International Development (USAID) initiative, and the AET mid-term review of the SU programme.

2.1. Physical and linguistic oppression

A south to north slave trade and history of separation laid the groundwork for north-south divisions even before Britain assumed the administration of southern Sudan in 1990 (Sommers, 2005). Fearing anti-colonial jihad, the colonisers attempted to preserve and protect the south from the Islamic and Arabic influence of the north, using education as a tool (Sharkey, 2012).

In the south, the system was underdeveloped to maintain a perceived purity of the people and to ease the administrative burden; it was feared that education might divorce students from their tribal customs and reduce their effectiveness as local leaders (Sommers, 2005; Johnson, 2003). What little education was provided came largely through mission stations, consolidating not only a linguistic divide between north and south, but also a religious one (Kevlihan, 2007).

The Rejaf Language Conference for southern Sudan in 1928 played down the use of Arabic as it was seen as a potential facilitator of Islamization. English was made the principal language, whilst six local languages were selected for use in schools as Method of Instruction (MOI) for the first years of primary education, further restricting the communicative possibilities between north and south (Nyombe, 1997; Kevlihan, 2007).
In 1946, the separatist policy of the British was retracted for the purposes of political control, and both north and south were treated as one country. A legislative assembly constituting only northerners took control and soon passed a resolution declaring Arabic as the language of the whole country (Nyombe, 1997). The move was met with resistance and resentment in the south, with many educated southerners feeling their positions were threatened. The results were twofold:

‘First, two tiers of education were born; one in the north and the other in the south. Second, many educated southerners who could only function in English were rendered functionally illiterate overnight and therefore socially and economically underprivileged due to the shift to Arabic’ (ibid.: 108).

After independence in 1956, Sudanese government policy codified the use of Arabic instead of English, eliminating local languages and making Arabic the MOI for primary schools (Hutchinson, 1996). Nyombe (1997) argues that it was by assimilating the southern education system into its northern counterpart that represented assimilating the south into the northern way of life. A southern rebellion was staged in 1958, which in turn led to an acceleration of the Khartoum-led Islamization campaign (Prendergast et al., 2002).

Whilst Miller (2000) notes that in Darfur the spread of the Arabic language did not necessarily mean the spread of Arab identity, Nyombe (1997) contends that the Arabic language was used as a means to Arabize the south, which in turn had deep political, educational and psychosocial implications in what was perceived as attempted northern ideological and linguistic hegemony:

‘it amounted to the government telling the non-Arabic groups elsewhere in the Sudan to adapt to the ways of life of the north, in terms of world view, language, and cultural outlook’ (ibid.: 111).

As a result, educational standards plummeted, with trainee teachers giving up, northern Arabic teachers refusing to teach in the south and Arabic being taught poorly.
In 1972, policy changed again and at the Addis Ababa Peace Agreement, the south was provisioned to use English alongside local languages once more, largely reverting back to the policy of 1928 (Marshall, 2006). Yet, with Arabic being increasingly adopted as a *lingua franca* in the south, the subsequent absence of Arabic-medium instruction caused disadvantages to southerners wishing to work or study in the north (Nyombe, 1997).

In 1983, the Agreement was broken and Sudan was transformed into an Islamic State, with the reinstitution of an Arabized-Islamized education system for all (Prendergast et al., 2002). The Sudan People’s Liberation Army (SPLA) rebellion which began shortly after, and the subsequent civil war, had massive impacts on education, devastating infrastructure and forcing the closure of schools (Kevlihan, 2007) [Box 2.1.].

**Key impacts of the war on education**

- Devastated infrastructure.
- Forced the closure of schools.
- Drove learners to leave education voluntarily and join the rebels.
- Divided children’s access to education based on geographical location: those in government-held areas typically learnt in Arabic and those in bush schools in SPLA areas learnt in English and local languages.

Box 2.1. Key impacts of the 1983-2005 war on education.
*Source: Author; Kevlihan (2007); Justice Africa Committee of the Civil Project (2001); Abu Bakr (1975).*

After the signing of the CPA, English was declared as the official language of South Sudan, acting as a counterweight to the northern influence of Arabic and in the view of Kevlihan (2007), was a breakaway from the identity that came with it. Whilst there are multiple South Sudanese identities, English language use is a step away from a Sudanese identity; in other words, firmly and finally accepting English is a symbolic break from the physical and linguistic oppression of the north. The Department of National Languages (2009), however, argues that issues of identity stretch far beyond language. Indeed, the new challenge is to roll out English so that power is not held in the hands of a few South Sudanese elites.
English-centred policy has not only made the learning of English a necessity for South Sudanese, but has changed people’s expectations as to what it can provide (Kevlihan, 2007). In the market of languages, English represents a gateway to advancement (Midhe, 2005; Kevlihan, 2007). However, in the current low capacity system, it is considered unlikely that such policies will realise these expectations in the short term. The result is that Arabic is still often used as a de facto language, and is tolerated in government and other official institutions (Sharkey, 2012). Given the low educational capacity of South Sudan, learning any language is a challenge, whilst a long history of switching language policies has significantly confused the linguistic environment.

2.2. IRI

The success of an IRI programme was noted above to depend on context, in two respects: programmatically and operationally.

2.2.1. Programmatically

2.2.1.1. The use of a radio

Mayo (1999: 1) notes how since 1920, ‘no other mass medium has attained comparable levels of audience saturation and acceptance’. In a nebulous way, learning has been taking place via radio ever since, long before being codified into IRI. After all, radio ‘is a ubiquitous technology for offering access to information, entertainment and education to the poorest constituencies’ (Naidoo and Potter, 2007: 164), providing reasonably equitable and affordable access. In language learning programmes, radio is considered to aid learning, particularly with speed and pronunciation; it is also thought to motivate learners to want to learn another language (Odera, 2011).

However, there are significant challenges to the use of the radio, particularly in the contexts often targeted by IRI programmes. Frequency Modulation (FM) broadcasts have weaker coverage the farther the listener is from the relay, thus favouring those closer to the transmitter, often in urban settings (World Bank, 2005). In addition,
learners and teachers are limited by broadcasts that occur at a particular time, without the possibility of them being turned off and supported by direct instruction (Naidoo and Potter, 2007).

In some instances, this can lead to the use of stored media, in the form of audiocassettes, CDs or MP3 recordings of broadcasts, instead of live broadcasting (World Bank, 2005). This alleviates some of the logistical concerns, ensures consistent sound quality, and gives more flexibility to the teacher both in planning and delivering lessons (Guay, 2000). Consequently, the cost is increased at least in the short term, teachers may skip lessons if pushed for time, and crucially, the wider community and potential indirect beneficiaries cannot listen to the lessons, thus massively restricting the audience (ibid.; Potter and Naidoo, 2006). In this instance, IRI’s secondary impact of increasing access is reduced to the learners in the class only. It is further noted by Adkins (1999: 48) that moving to stored broadcasts can also place demands at all stages, and where institutional capacity is weak, ‘this extra complexity could prove harmful’ [Table 2.1.]

Table 2.1. Summary of the benefits and constraints of live broadcasting and stored media in the delivery of IRI.

Source: Author; World Bank (2005); Naidoo and Potter (2007); Guay (2000); Potter and Naidoo (2006); Adkins (1999).

<table>
<thead>
<tr>
<th>Live broadcasting</th>
<th>Stored media</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Advantages</strong></td>
<td></td>
</tr>
<tr>
<td>1. Reaches a mass audience.</td>
<td>1. More flexibility in:</td>
</tr>
<tr>
<td>2. Cheaper over time.</td>
<td>a. Broadcast times.</td>
</tr>
<tr>
<td></td>
<td>b. Stopping/repeating.</td>
</tr>
<tr>
<td></td>
<td>c. General access.</td>
</tr>
<tr>
<td></td>
<td>2. Consistent sound quality.</td>
</tr>
<tr>
<td><strong>Disadvantages</strong></td>
<td></td>
</tr>
<tr>
<td>1. Learning lost if there are:</td>
<td>1. Does not reach mass audience.</td>
</tr>
<tr>
<td>b. Transmission errors.</td>
<td>3. Can add extra complexity due to:</td>
</tr>
<tr>
<td>a. Limited by broadcast times.</td>
<td>b. New technologies.</td>
</tr>
<tr>
<td>b. Inability to stop/repeat.</td>
<td></td>
</tr>
</tbody>
</table>
This exposes a key tension and debate in the life cycles of IRI programmes; where logistical capacity to deliver live broadcasts fails, a decision needs to be taken to readjust the comparative benefits and constraints to the learner and wider community.

2.2.1.2. Other issues

Dock (1999a) indicates that two lessons must be learnt in order for educational radio programmes not to fail. Firstly, to appeal to a large audience, programme content needs to be broad and not limited by curriculum objectives. Indeed, it should represent the educational requirements of the target audience, and if possible, be developed in partnership with them. However, the World Bank (2005) recognises that many programme developers plan content that is too broad and ambitious, and they would be better limiting this to ensure mastery of the subject matter. Whilst integration with the national curriculum can be problematic, this can provide a framework to guide content, in contexts where such a curriculum exists.

Secondly, Dock (1999a) notes that individual teachers and classes move at different paces; in theory, IRI mitigates against this by governing the pace of the learning process and provides a degree of quality standardization (World Bank, 2005), but this is reliant on live broadcasting.

The World Bank (2005) notes the importance of careful determination of the target audience right from the design stage, as this will heavily influence efficacy and acceptance. Particularly when broadcast, the

‘content reaches a broad audience with differing levels of interest and comprehension, and the challenge is to maintain listener interest and involvement’ (ibid.: 37).

Given the vast differences in the design and implementation of IRI programmes, so too is there a difference in the ways in which they hope to be sustained (ibid.). Dock (1999b) notes a mixture of factors, including a well-managed programme, political support and institutionalisation. A key factor is acceptance by local populations, particularly by teachers and communities, and if this is achieved, there are a number
of examples, including the Dominican Republic, Honduras and Lesotho, where IRI programmes continue despite completion of funding (Potter and Naidoo, 2006; Adkins, 1999; World Bank, 2005). Notably, planning the ‘recurrent costs to cover contact with teachers in the classroom is essential’ (Helwig et al., 1999: 16).

2.2.2. Operationally

2.2.2.1. Learners

The benefits of IRI for learners have been noted with regards to higher achievement by primary school students and adult learners alike (Leigh and Cash, 1999). If an IRI programme is successful, then learners should have increased access to higher quality education. The World Bank (2005), however, recognises a cumulative impact, across and within programme cycles, requiring learners to consistently attend classes to obtain the maximum benefit.

A key concern of IRI programmes is that classes comprise learners of different levels and abilities. Also, because radio is a one-way medium, there is no way of knowing if the learners are responding correctly or not; even within a group guided by a teacher, correct group oral responses drown out incorrect ones (Friend, 1998). Struggling learners can become lost, whilst how much a learner obtains from an IRI programme or lesson can significantly depend on the actions of the teacher in the classroom.

2.2.2.2. Teachers

Bosch (1997) notes that initially, IRI programmes sought to be ‘teacher-proof’, but this concept has been largely discarded. There is, however, a tension as to how integral the classroom teacher is. Dock and Helwig (1999: 7) hold that ‘the distant teacher carries the main weight of the teaching’, with the classroom teacher there to facilitate. On the other hand, an expanded role can require periods of teaching, for instance in language programmes; the World Bank (2005: 11) notes that IRI absolutely ‘requires the involvement of a teacher or advanced mentor’. Where both converge is that the teacher should be a facilitator figure, rather than an out-and-out teacher.
Whilst the learners had previously been considered the primary audience, there has been growing recognition that teachers are a key audience also, and that how well the programme supports teacher training and development can influence how effective the programme is for the learners (World Bank, 1995). Potter and Naidoo (2012) note that, particularly in settings where there is low teaching capacity and little teacher training, there was a realisation that the teacher should be a partner in learning. Involvement in successful IRI programmes has been found to improve teaching quality and empower teachers in their professional lives (Potter and Naidoo, 2006). Helwig et al. (1999: 22-23) note that in fact,

‘[t]raining and contact with the classroom teachers, far from being an optional extra, is vital to the life and sustainability of the program’.

Teachers with little training or knowledge of a particular subject can learn alongside the learners. In this instance, both the distant and classroom teachers facilitate the lesson, ‘but neither dominates’ (Leigh and Cash, 1999: 29).

This growing recognition of the importance of the teacher is especially important given the increase in the weight of responsibility on the classroom teacher in some programmes, for instance in South Africa where

‘the teacher is given a much greater degree of freedom and responsibility...The teacher leads the class and provides translation into the mother tongue’ (Helwig et al., 1999: 22).

This is indicative of a growing requirement for teachers to mediate content, particularly in Mother Tongue (MT) (Kirkwood and Joiner, 2003; World Bank, 2005); as well as facilitating the learning process, teachers must support and clarify (Moulton, 1994).

In a number of IRI programmes, this has led to a movement away from a learner-centred curriculum to a dual-centric one, of learners and teachers. In South Africa, it was recognised that: many teachers lacked professional qualifications; appropriate teaching methodologies had not been widely disseminated within teaching communities; resources were often lacking; and crucially, English was not the first
language for the majority of teachers (Potter and Naidoo, 2006). In such a context, teacher development is evidently crucial to the success of the delivery of the programme. Even with the teacher as facilitator, what is channelled to the learners is significantly dependent on that teacher.

2.2.2.3. Communities

Most IRI programmes involving broadcasts reach a wider audience than just those learners in the classroom. This includes those interested but unable to register in classes, and shadow audiences of interested listeners (World Bank, 2005). Radio is an obvious medium for the sharing of ideas and knowledge, such that listeners in their homes can learn new language skills, hear about current issues and be exposed to key messages (Berman, 2008). In some contexts, the IRI programme itself is designed to be rooted in the community; for example, in Zambia, operation depends on volunteer facilitators and the provision by parents and community members of chalk, radios and batteries (World Bank, 2005).

The benefits to the community are difficult to disaggregate, but IRI programmes are seen to contribute to informal learning (World Bank, 2005). More clearly, when broadcasts stop and programmes move to stored media, any potential benefit to the wider community is seen to diminish dramatically.

2.3. IRI in South Sudan

The South Sudan Interactive Radio Instruction (SSIRI) programme was introduced by USAID in 2004, with funding ceasing in 2012. The programme largely served as a supplement to primary education and as part of ALP. Leigh and Epstein (2012) found both programmatic and operational problems in line with those summarised above [Box 2.2]. These obstacles were identified by Leigh (2008) four years earlier, and there was talk of moving to MP3 stored media, but there was not an available radio suitable to deliver in this format.
SSIRI benefits and constraints

Benefits

- The teacher was a key partner in the lesson, with some employing different pedagogical practices to non-SSIRI attached teachers, suggesting the training was working to some degree.
- Consensus that SSIRI had brought benefits for learners and teachers, although more research would be needed to quantify that.
- Learners were more engaged and motivated in lessons using the radio.
- The radio was adding value.

Constraints

- Issues with ensuring the correct programmes were broadcast at the correct times and in the correct order.
- Logistical difficulties getting learners into class in time for the radio.
- Low teaching capacity, observed as mediocre to poor.
- Concerns that that the institutional integration of SSIRI was not sufficiently strong for the programme to continue unsupported by USAID.

Box 2.2. Key findings of the SSIRI Performance Evaluation Report.
Source: Author; Leigh and Epstein (2012).

2.3.1. Speak Up!

SU started in 2011 and targeted learners who had dropped out of, or missed out on, education. The curriculum was designed by education experts in line with the South Sudan curriculum and other English language learning curricula. In recognition of the importance of indigenously supported or generated curricula, this role, along with the obtaining of interviews for the broadcasts, was later handed to programme-trained South Sudanese journalists. The level was set at Primary (P) 4 and teachers identified from among the target communities; most were already serving teachers. Whilst objectives were to increase English language skills and discussion and knowledge of key messages, there was a recognition that teachers were both on the supply and demand sides of the programme (Kamuli and Rounding, 2012).
SU lessons, as part of a twice-weekly six-month course, are structured similarly to other IRIIs: 30 minutes of teacher-led before-listening activities introducing the forthcoming radio content, including keywords and a grammar point; 30 minutes of radio broadcast including three interviews around key messages and distant teacher guided activities; then 60 minutes of after-listening activities based around the keywords and key messages [Table 2.2]. The radio element is supported by a learner workbook and teacher guidebook [Appendices I and II] (ibid.; AET 2013a; AET 2013b).

Table 2.2. A SU lesson.
Source: author; AET (2013a; 2013b).

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
<th>Examples of resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>00:00 - 00:30</td>
<td>Before-listening activities.</td>
<td>Language summary: Future tenses, using both “going to” and “will”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Going to = a plan</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Will = a decision</td>
</tr>
<tr>
<td></td>
<td></td>
<td>I’m going to use food for growth</td>
</tr>
<tr>
<td></td>
<td></td>
<td>I’ll go to the market tomorrow.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>I’m going to buy some land</td>
</tr>
<tr>
<td></td>
<td></td>
<td>I’ll build a house or plant some crops</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Question + going to</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Question + will</td>
</tr>
<tr>
<td></td>
<td></td>
<td>What are you going to do today?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>What will you do today?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Answer + going to + will</td>
</tr>
<tr>
<td></td>
<td></td>
<td>I’m going to do some work, and then I’ll get some food.</td>
</tr>
<tr>
<td>00:30 - 01:00</td>
<td>While-listening activities.</td>
<td>Interview 1: Food for Growth.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Key words: nutrients, proteins, vitamins, strong, weak.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Interview 2: Child Abduction.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Key words: slavery, abduction, abduct, painful, lose.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Interview 3: Sports in School.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Key words: sport, encourage, athletics, talent, training.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Questions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Say the answers out loud.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1. Is food for growth the nutrients the body needs?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Are there proteins and vitamins in food for growth?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Where will she get the food for growth from?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. Is she going to prepare the food for growth?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5. What is the benefit her people are going to get from food for growth?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b) Make up the questions for these answers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Examples:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Answer</td>
</tr>
<tr>
<td></td>
<td></td>
<td>I’m going to eat some potatoes.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>I’m going to buy seeds.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>What are you going to eat?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>What are you going to buy?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>I’m going to buy some land.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>I’m going to drink some water.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>I’m going to study English.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>I’m going to get some goods.</td>
</tr>
</tbody>
</table>

Some additional activities are interspersed.
After-listening activities.

Guided by the teacher, learners complete a range of written and spoken activities based on the interviews, grammar point, or keywords.

Lessons cover a vast array of topics [Appendix III], with a number of key themes for the incorporated messages [Box 2.3]. Whilst initially broadcast live, SU encountered many logistical problems and as such moved to MP3 stored media in solar- and hand- powered rechargeable radios for the second cycle.

<table>
<thead>
<tr>
<th>Key themes of lessons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environment</td>
</tr>
<tr>
<td>Politics</td>
</tr>
<tr>
<td>Sport</td>
</tr>
</tbody>
</table>

Box 2.3. Key themes of SU lessons.
*Source: Author; AET (2013a).*

The SU mid-term review noted a disparity between the target and actual audiences, but documented increases in learner ability of those participating (Kamuli and Rounding, 2012). There was a clear recognition of the importance of the teacher:

‘The quality of teachers has a direct bearing on the successful delivery of Speak Up and the ultimate attainment of the target indicators’ (*ibid.*: 28).

In saying this, training was considered ‘inadequate given the challenges teachers face’ in the delivery of SU, notably large classes of mixed abilities and ages (*ibid.*: 22). At the community level, many indirect beneficiaries were noted, gaining exposure not only to the English language, but also a number of key messages as starting points for discussion (*ibid.*).
This research was carried out in conjunction with AET. The aim of the research was:

To investigate the extent to which the ‘Speak Up!’ programme is facilitating participant skill and knowledge development, and community engagement.

This is all framed within the South Sudanese post-conflict context, and guided by the Freirean pedagogical framework. It seeks to investigate the impacts of an IRI, relative to the individuals involved (learners and teachers) and the communities in which it is based and was broadcast. The research followed three objectives [Table 3.1.]:

Table 3.1. Research objectives.
Source: Author.

<table>
<thead>
<tr>
<th>Objective</th>
<th>Expected outcome</th>
<th>Target population</th>
<th>Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To explore the actual and perceived skills and knowledge acquired by SU learners.</td>
<td>To understand the benefits and constraints to the learner and community.</td>
<td>Adult beneficiaries of the SU programme; teacher; Outreach Officers.</td>
<td>Interviews to gain first-hand experiences and perspectives, and observation to see the programme in action.</td>
</tr>
<tr>
<td>2. To explore teacher involvement in the SU programme.</td>
<td>To understand the benefits and constraints to the teacher, learner and community.</td>
<td>Teachers; Outreach Officers.</td>
<td></td>
</tr>
<tr>
<td>3. To explore the community impacts of the SU programme.</td>
<td>To understand the wider benefits and constraints.</td>
<td>Outreach Officers.</td>
<td>Interviews to gain first-hand experiences and perspectives, with teachers and Outreach Officers as proxies for communities.</td>
</tr>
</tbody>
</table>
Thus, extending from the literature review, the research project is theoretically and practically structured as shown below [Figure 3.1.]:

Figure 3.1. Literature review progression into research project.  
Source: Author.

3.1. Sampling, locations and research encounters

As fitting for qualitative research, purposive sampling was used for interviews, both with learners, teachers and Outreach Officers, allowing judgements to be made about
‘who will provide the best perspective on the phenomenon of interest’ (Abrams, 2010: 538).

Learners and teachers attending SU lessons were targeted for possible interview on site visits, but this had a number of associated logistical and practical issues, as discussed below. Outreach Officers were recruited at the Resource and Open Learning (ROLE) Centre in each state visited. Which learning centres were visited largely depended on the judgment of project staff. In each state, care was taken to visit a mix of urban and rural centres, with an acknowledged mix of ability on the part of both classes and teachers. Choices were also constrained by logistical issues like the cost and availability of car hire, road quality and the availability of project staff.

Research was carried out in Central Equatoria (Juba), Lakes State (Rumbek) and Western Equatoria (Yambio) [Figure 3.2.]. There was an intention to visit Jonglei (Bor) but time constraints rendered this not possible.

Figure 3.2. Research locations in South Sudan.
Source: Geographic Guide Online (2013).
Ultimately, research encounters took place as shown below [Table 3.2.]:

Table 3.2. Summary of research encounters.  
Source: Author.

<table>
<thead>
<tr>
<th></th>
<th>Central Equatoria</th>
<th>Lakes State</th>
<th>Western Equatoria</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Interviews</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teachers</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Outreach Officers</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Learners</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>12</td>
</tr>
<tr>
<td><strong>Observations</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SU lessons</td>
<td>6</td>
<td>3</td>
<td>7</td>
<td>16</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relevant meetings</td>
<td>4</td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Other NGO visits</td>
<td>2</td>
<td></td>
<td></td>
<td>2</td>
</tr>
</tbody>
</table>

3.2. Research methodology

This research involved a literature review, semi-structured interviews and observation, following the path of similar research into IRI programmes (Potter and Naidoo, 2009). A qualitative research approach was taken, aligned with the naturalist paradigm of enquiry, in order to capture the experiences and perceptions of people themselves (Malterud, 2001). All site visits were made accompanied by an AET Outreach Officer, fluent in English and the local language. Interviews were all conducted in English, and when with learners and teachers, independently of AET staff. Particularly when in South Sudan, the methodology developed, as discussed below.

3.2.1. Literature review

A comprehensive literature search of books, journals and online reports was conducted on the University of Liverpool Discovery Database, using a number of key
words in different combinations [Box 3.1.]. The initial results were downloaded or assembled and skim read for relevance. Once sifted, the selected literature was critically appraised, with detailed notes taken. In South Sudan, this initial literature was supplemented with policy documents, evaluations, and further recommended reading, including thorough analysis of both the learner workbook and teacher guidebook that accompany the SU programme.

### Search terms

Interactive radio; English education radio; education conflict; non-formal education conflict; education conflict Africa; education South Sudan; education conflict South Sudan; Arabic English South Sudan.

Box 3.1. Literature review search terms.

*Source: Author.*

#### 3.2.2. Interviews

Interviews were used specifically as they ‘gather descriptions of the life-world of the interviewee with respect to interpretation of the meaning of the described phenomena’, and more importantly to ‘capture the voices’ of key informants (Kvale, 1983: 174; Rabionet, 2011: 563). Three separate semi-structured topic guides were used, depending on the interviewee [Appendices IV, V and VI], allowing for full participation and guiding of the discussion; this allowed the participants to contribute as desired, sharing experiences, whilst allowing for the unexpected (Grandstaff and Grandstaff, 1987). This was useful with respect to the ‘explore’ elements of the objectives, allowing thoughts, expectations and attitudes to emerge in a natural setting (Malterud, 2001). The interviews were held in quiet locations, near learning or AET centres, where the discussions could not be heard by others.

There were three main developments in the research methodology with regards to interviews once in the field. The first was that there was an intention to interview a number of learners in each state, but there were two main challenges with this approach. Firstly, many learners arrived at the onset of the lesson and wished to depart immediately at the end. Those most available for further discussion were often not the adult learners, rather primary school children who joined the lesson.
Furthermore, attempted interaction during the lesson would have been inappropriate given the learning setting. Secondly, in interviews early on, and with warning of this given beforehand, many learners gave similar and stock responses to questions and were reluctant to talk of programmatic issues. This was even the case following lessons that contained clear issues, and with direct prompting. This was an indication of the perceived value of the programme, and a reluctance to talk critically of it for fear of removal.

This led to the second development in the research methodology. As a result of the predisposition to talk positively of all experiences, and the evident variance in teaching style and quality from observation, the central role of the teacher became transparent. Thus, a focus on the teacher became more critical in order to explore the potential benefits to the learner. Given the issue of teachers preparing before the lesson, and wanting to leave straight after, formal interviews were supplemented with informal discussions with teachers at all centres visited, which were unrecorded but supported and informed the lesson observation.

The third development was as a result of the SU programme moving from broadcasts to stored media for the second cycle. A mid-term review had explored community impacts, but given literature stating the difficulties in measuring this impact, the lack of new broadcasts and logistical issues, community focus groups were not held. Primarily, there were too many variables created when attempting to identify those who had not taken part in the programme but had listened to broadcasts in 2011-2012, and disaggregating the impacts and perceptions of SU vis-à-vis other broadcasts. Instead, Outreach Officers involved in both programme cycles and engaging with local communities, were used as proxies for community impact and perceptions.

3.2.3. Non-participant observation

Non-participant observation was used to observe SU classes, the use of the radio, and teacher-learner interactions. This was deemed an appropriate method as it allowed for an insight into SU operationally, in a naturalist setting, without involving direct interaction with participants, such that both learners and teachers could learn as normal (Williams, 2008).
Notes were taken primarily on how the lesson progressed, how the radio was used, learner or teacher successes and difficulties, general class responses and any questions or thoughts that occurred. Even if something seemed unimportant at the time, a note was taken, given that

‘the significance of a particular observation may not become apparent until it is coordinated with other observations and a larger picture is developed’ (Ostrower, 1998: 59).

At the end of each observation, the notes were formalised and analysed, and with more observations, notes could be compared and cross-analysed, exposing trends and themes. In addition, observation findings informed later interviews as part of the iterative research process.

### 3.3. Data analysis and dissemination

Interviews were recorded and transcribed, and observation notes typed and sorted as soon as possible to increase accuracy. Upon completion of the research, the notes were read for emerging concepts and an initial coding frame constructed based on open coding. This was followed by focused coding, refining categories and connections between concepts (Charmaz, 2001). For this second stage, NVivo software was used as it allowed for easy cross-case analysis and assisted the construction of a rigorous database (Ozkan, 2004). The data was then explored and examined in inductive analysis, as guided by the themes of inquiry of Patton (1987).

The research was completed as part of a Masters in Humanitarian Studies. The anonymised research findings, assembled here, will be made available to Africa Educational Trust and to any participant.

### 3.4. Quality assurance

To ensure credibility, data was collected and analysed rigorously and an open, inductive attitude was taken towards the research (Lincoln and Guba, 1985).
Respondent validation was used to ensure that the researcher's understanding accurately reflected the view of the participant.

Whilst transferability is a contested notion in qualitative research, knowledge of a particular scenario was gained in this research, allowing for recognition of similar ideas or concepts in other contexts (Stake, 1978).

Whilst complete objectivity is difficult in qualitative research, potential threats were diminished by adopting 'empathic neutrality' (Patton, 1990: 55), whereby the researcher attempted to be empathic towards participants, and neutral towards the findings. This required non-judgment to be made of what was said, collected, reported and analysed, even if personal opinion supported or contested the data. This was particularly crucial as part of non-participant observation.

Given the issues regarding learner and teacher responses, this highlighted the importance of triangulation of results - the need to study the same phenomenon using different methods (O'Donoghue and Punch, 2003). Ultimately, interview data were compared with observation data, which together were interrogated against literature review findings.

3.5. Ethical considerations

Ethical approval for the research was obtained from the Liverpool School of Tropical Medicine. No younger learners were interviewed.

3.5.1. Voluntary, informed consent

Before interviews, it was important that interviewees understood the purpose of the research, and that it was not part of AET monitoring or evaluation procedures. This was to allay any potential fears that the interview or lesson observation was being conducted to evaluate the performance of the learners, teachers or Outreach Officers. An information sheet was used as a guide for explaining the research before oral consent was obtained and the interview proceeded [Appendices VII and VIII].
Similarly, before observations, the role of the researcher and the purpose of the research were explained to the class in conjunction with the Outreach Officer and teacher. Oral consent was gained from learners to allow the researcher to sit at the back of the room. It was made clear that no direct recordings would be made, although written notes would be taken.

3.5.2. Anonymity and confidentiality

Anonymity and confidentiality for all participants was guaranteed and participants are later identified simply by a letter, depending on their role, and a number, based on when the interview took place chronologically; observations are similarly labelled [Appendix IX].

3.6. Limitations of the research

Five key limitations to the research were identified:

1. Experience of the researcher
   Despite the researcher having a number of months of research experience overseas, this was still a limitation given the new context. Knowledge from research methods training was applied, and particularly with regards to cultural and language issues, advice was sought from experienced project staff.

2. Number and location of sites visited
   Given logistical and time constraints, it was not possible to visit Jonglei state. In addition, within each other state, field visits were limited by road quality, and available transport or project staff, whilst it proved difficult to locate and gather communities for focus group discussions which ultimately did not take place. However, care was taken by the researcher and project staff that a spread of urban and rural centres were identified and attended in each state.

3. Gatekeeper bias
   The fact that project staff were guiding the researcher to AET supported centres raised the potential, in some states more than others, that visits were made to
either the logistically most accessible or best performing centres. In saying this, there was recognition of the need to see a good cross-section and care was taken to visit a range of variably performing classes and teachers.

4. **Teachers pre-warned of visits**
As it was made continually clear that this research project was not a monitoring and evaluation exercise, teachers were approached beforehand for consent for site visits and a potential interview. Whilst this was clearly a necessary step, it did run the risk of the teacher preparing for or delivering the lesson differently to how he or she normally would, which may have influenced the findings of observations.

5. **Hawthorne effect**
Linked to the pre-warning, although the researcher sat at the back of the classroom and did not contribute during lesson observations, his presence may have influenced the teacher’s delivery of the lesson.
After interview and observation, four key programmatic issues were identified, which are explored in turn. This provides an insight into an IRI working in a post-conflict context. Then, attention turns to Objectives 1 and 2 concerning learners and teachers, and at this point, to aid later discussion and more clearly disaggregate differences, information obtained in interview and information gained through observation is split into two sets of results by the qualitative technique used. This is to better draw similarities and differences between perception and practice in the discussion. A focus on learners highlights the benefits and constraints of IRI for increasing language skills and raising critical consciousness. A focus on teachers identifies the potential for IRI to facilitate teacher-learner learning and develop teaching capacity. Finally, Objective 3 and communities are considered, charting the change from 2011-2013, which in turn looks at the wider impacts of SU, in terms of dissemination of language skills and the facilitation of discussion on key messages, also potentially raising critical consciousness.

4.1. Current issues in SU

4.1.1. Benefits and constraints of the use of a radio

All learners, teachers and Outreach Officers interviewed expressed satisfaction with the use of the radio as an aid for instruction. It is the most popular form of communication in South Sudan and access is widespread:

‘the radios are very...useful, especially this year, very special radios designed for SU’ (OO4).

Hearing spoken English and being invited to communicate in English is something different that other programmes do not offer:
'the different tune and the words of the radio, is different from the human being when you go outside...it provides additional learning process’ (OO4).

Indeed, SU is unique in what it offers for adult learners in South Sudan, as

‘the teacher is inside the radio, the subject of the matter that is being discussed, it is in the radio...and the lesson is being dispersed through radio, so everything is within the radio...what attract them is the programme in the radio, not the tutor’ (OO4).

Programmatically, there has also been improvement between the use of the radio in the first and second cycles. The solar-panel has reduced the problem of buying batteries, whilst with the move to MP3 stored media, teachers have more control over the time and frequency of lessons which can be moved if there is a logistical issue:

‘it’s there when you need it, even if it’s cloudy or rainy, it’s there’ (OO2).

‘if there is a disruption one day, they will not mind about it, but last year, when there was rain, it would destroy everything’ (OO4).

Teachers can stop and restart the radio should learners require revision of a particular aspect and lessons can more easily be rescheduled. In addition, there was hope that teachers could choose parts of the lesson most appropriate to the learners’ abilities. In practice and from observation, this seemed to occur more in terms of the focus of the lesson, be it on the vocabulary, grammar or message depending on learner ability, rather than choice of playback.

4.1.2. Content and resources

4.1.2.1. Language skills

When comparing policy and practice through observation and interview, there seems to be a tension as to whether SU is delivering training for English language speaking proficiency or English literacy. At policy level, the key focus is on speaking and
listening. Indeed, general consensus across all states was that the speaking and listening element was central to the programme:

‘it is all about the interview. You talk, then I talk, then we discuss’ (OO2).

It was identified that the programme is even useful for those who are already literate in English, but are weak speakers:

‘it's even within the offices here, you got someone in the office, they write something 100%...they have difficulty speaking.’ (OO1).

Activities before and after listening to the broadcast theoretically involve a high communal element, such that speaking and listening practice runs right through the class. However, in recognition of the four skills of speaking, listening, reading and writing, an Outreach Officer remarked that

‘SU teaches all’ (OO2).

Indeed, in its present state, SU expects and encourages the development of literacy skills. Without an overt focus on reading and writing, the time allocated to enhancing these skills within SU was generally, across all states, deemed sufficient:

‘for listening, it is only thirty minutes, then the other one hour and a half is for exercise: reading and writing. But the time, it is okay’ (OO6).

Reflecting this, the learner workbook was found to have a strong writing element, whilst supplementary readers are designed to stimulate reading. After thorough workbook analysis, the majority of the after-listening activities were found to be based around writing, with a greater emphasis on grammar than vocabulary; similar exercises are used to improve both skills but are deployed in differing amounts [Figure 4.1.]:
Additionally, a learner identified that reading and writing skills could be developed outside of the class setting, by way of the workbook and readers:

‘because I [am] not reading well, when I go back to home, I read my exercise then I remember’ (L1).

Highlighting the importance of reading and writing skills as part of all-round language proficiency, an Outreach Officer noted that

‘reading is the most important skill...also writing can give you a lot of memory, because when you can write you can memorise, then when you talk, it gives you also a different way of talking’ (OO2).
Generally, interviewees recognised the interconnectedness of the four skills. For literate office workers, the speaking and listening element can assist with their spoken English. For the learners newly acquiring English, the reading and writing part can allow them to develop their language for spoken interaction.

4.1.2.2. Key messages

In addition to the language skills, SU also encourages the discussion of a number of key messages each lesson. In almost all interviews and observations, it was noted that three interviews per lesson, each containing a separate key message, is perceived as too much information for learners to process and remember:

‘they get exhausted; this is a problem for the learners themselves’ (OO1).

‘they will be confused, because another lesson come in and another come in and another one come in…if they put only one specific topic…it will be really easy for the learners to cope up with the information’ (OO5).

‘even a teacher cannot go and teach a class so many subjects in a period’ (OO6).

4.1.3. Targeting

Despite the SU programme aiming for 60% female participants and out-of-school learners, from observation and monitoring data, many classes actually attract a high number of primary school learners looking to supplement their current education. It was identified by Outreach Officers that, sometimes, external factors affect the ability of the target audience to take part in the programme, and when they do, other factors may influence their attentiveness, which impacts on their willingness to re-attend:

‘the challenge is the time factor. Because in our communities, some…when they come to learning centre, I think they will be attentive but there are still some of them, their lives are complicated…like when you are hungry and you are learning, I think their attention may not be 100%, you will be thinking of yourself and also the kids’ (OO4).
There was also sometimes a discrepancy between the level of English deemed to be appropriate by interviewees, and the actual level of English understood by learners in observed classes. This was identified in interview as a possible reason for why the target audience is not met, as SU presupposes P4 level of English.

Outreach Officers in particular recognised that with the cessation of live radio broadcasts, a considerable number of indirect beneficiaries have also been lost. However, it was noted in Central Equatoria that, even though there are fewer drop-outs attending SU than anticipated, the programme could be seen as preventing drop-outs, supporting current learners in their studies so that they can keep up in school.

4.1.4. Certification

Certification is deemed by learners to be extremely important. As they invest a significant amount of time in the programme over the course of the six months, they hope not only to improve their English, but also receive some acknowledgement of their achievements. As of June 2013, many learners had still not received their certificates having completed the 2011-2012 cycle, a situation that

‘maybe can discourage some people…they are learning but they don’t get their certificate in time’ (OO6).

The certificates act as recognition of completion, encouragement for attendance, and support for job applications. Indeed, an intention of the programme is to develop English skills to improve access to further education and enhanced employment opportunities, but even if these skills are developed, formal certification is often necessary, or at least helpful, in this process:

‘it will help them even when there is advertisement, so if they want to take people for labour work…they can take that to work and it will be really good’ (OO5).
4.2. Learners and teachers

It was considered by a range of people involved in the programme that the teacher-learner relationship is a critical part of the SU programme, with the level of discussion in many cases determining the success and quality of lessons. It is considered that, for a number of reasons discussed below,

‘the success of SU depends on the capacity of the teacher’ (OO3).

4.2.1. Interviews

4.2.1.1. Learners: language ability

Interviewees generally perceived that learners could cope with the level of English in SU; for older learners returning to or involved in other education, SU reflects some of the content of ALP, but for others, it is the only structured means by which English is learnt. However, it was acknowledged that there were different levels in classes, and even drop-outs are not from the same level:

‘some are Primary 5, some are Primary 7, some are Primary 8...some they have low ability and some are okay’ (OO4).

Also, a teacher identified that for his learners, most of the grammar content and key messages were revision, but the keywords contributed to expanding learners’ vocabulary. On the other hand, an older learner whose experience of SU was her first real exposure to English, and had secured a job working at the local airport, thought the level of English was ‘okay’, despite acknowledging that,

‘we are not speak English well, we don’t know English very well, we learning broken English…I bring my exercise out, then I remember English’ (L1).

Indeed, the change in the use of the radio now means that
'they can cope up because…this year the lesson is with the teacher in the memory card…so he is free even to replay that lesson if the learners doesn't understand some parts' (OO6).

In one state, where classes generally consisted of younger learners, a teacher remarked that,

‘the learners are calling to tell me that this English is good in P4 or P5…[but in] P3 and P2 the radio…it’s too difficult' (T1).

It was acknowledged that understanding at class level was varied, but it also was vocalised that:

‘we can see three quarters of the class understand' (OO5).

Nevertheless, there was widespread agreement that learners improve over the course of the SU programme. There are in fact,

‘notable improvements…they improved listening skills because they know now how questions are asked' (OO4).

Indeed,

‘throughout the course, the learning is improving' (OO5).

SU exam results also bear this out with an 85% exam pass rate (n = 3925).

4.2.1.2. Learners: understanding and discussing key messages

It was generally agreed by learners, teachers and Outreach Officers that learners understand the key messages held within the broadcasts. Outreach Officers reported evidence of learners discussing their new knowledge amongst themselves, and within their communities:
‘they learn English, and they learn the subject of the matter, then they discuss’ (OO4).

‘when they went home to their families, they do talk of what they learn’ (OO6).

As with any programme, there was also evidence that certain messages are not communicated clearly or understood correctly by some learners:

‘John Garang and [Nelson] Mandela, they are friends...John Garang go to school then...stayed with Nelson Mandela’ (L1).²

Where these messages act as reinforcement for ALP content or public health information, the messages act as revision, albeit in English as opposed to the local language.

4.2.1.3. Teachers: language and pedagogical ability

As Outreach Officers identified, central to the success of SU is the quality of the teachers delivering the lessons. It was noted that last year, teacher ability

‘was a problem. This year, there is an improvement because they tried to get better tutors. Those who were not doing well last year were removed...because they were unable to do the work...the ones we have this year are better’ (OO1).

Generally, however, it was perceived that

‘they are okay, as the people we actually selected as tutors, they are people with capability, especially those who have completed P4, they are best English’ (OO4).

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² Interview conducted shortly after Lesson 8 (being HIV positive, a story of Creation, and Nelson Mandela); this a week after Lesson 6 (a first aid nurse, a farmer and John Garang).
There was a sense that the learners and teachers were actually learning together throughout the programme, with the teacher acting as more of a facilitator for learning in some contexts, as noted by Outreach Officers:

‘I do tell him [the teacher] please don’t be ashamed, you have improved…you attend these lessons together with the new learners, so that you improve’ (OO1).

‘it has improved their spoken English as well as the learners. All of them are benefiting from the programme’ (OO6).

Improvement is not only as a result of the training provided as part of participation in the programme, but is also by delivering the course itself. Within the lessons, teachers can improve their language skills. This is critical as it was noted given the level of English and the importance of the lesson’s messages,

‘you have to understand something before you can teach something’ (OO6).

Even though increasing teacher capacity was not included in the initial SU proposal, this has later been added and is perceived by management, Outreach Officers and teachers themselves to be having a positive effect. Teachers are guided in pedagogy to some degree, for instance when they are directly instructed to assist learners or guide activities by the distant radio teacher. This aspect is important given the responsibility on teachers to judiciously use MT, which was perceived as critical to learner understanding by both Outreach Officers and teachers. Most of all, it is a useful revision tool to check learner comprehension after a particular activity or learning point:

‘if the learner did not understand or does not understand in English well, you can give it in mother tongue, so then he can remember it, he won’t forget it, he will take it into practice’ (OO2).

Outreach Officers in all states were supportive of MT usage, but in moderation:
‘translate everything...will make them even weak...it should be limited so it enables them to cope’ (OO6).

There was consensus that SU classrooms should be an English-oriented environment, given that many learners' homes are MT-based, with a lack of English spoken by parents or siblings:

‘if you continue using dialect...you will even forget to communicate in English well...usually they go back and just talk in mother tongue’ (OO4).

To codify the use of MT within the SU programme is seen by some as potentially problematic, given the potential controversy this could create through inclusion and exclusion of certain languages. Teachers are however given the freedom to use the learners' first language when this is deemed necessary or useful.

4.2.2. Observation

4.2.2.1. Learners

Given the target level of SU, and the demographics of some of the classes, it was recognised through observation that there is a wide variance across states and classes as to whether learners can understand and cope with the level of English. A wide range of positive and negative learner and teacher interactions were noted. Again, there was a wide variance across states and classes, but there were a number of general trends.

Firstly, across all states and classes, learners were largely engaged in lessons and expressed satisfaction with the SU programme. Secondly, during lessons, learners responded more confidently to questions requiring simple, declarative responses such as ‘yes, it does’ and ‘yes, it is’ than to questions requiring more complex responses, which were generally left unanswered. This was aside from a few confident learners, or when answered almost by-rote with the shorter declaratives. In a number of cases, learners incorrectly responded with either ‘yes, it does’ or ‘yes, it is’ to complex questions; given that together these are correct responses just over
25% of the time [Table 4.1.], it may be that learners expect this to be the answer and give it when they do not understand the question.

Table 4.1. Required responses to questions in while-listening activities. 
*Source: Author; AET (2013a).*

<table>
<thead>
<tr>
<th>Response</th>
<th>% of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>He, she, it, they...</td>
<td></td>
</tr>
<tr>
<td>Does / does not, do / do not</td>
<td>15.06</td>
</tr>
<tr>
<td>Is / is not, are / are not</td>
<td>10.58</td>
</tr>
<tr>
<td>Can / cannot</td>
<td>4.21</td>
</tr>
<tr>
<td>Did / did not, do / do not</td>
<td>5.83</td>
</tr>
<tr>
<td>Was / was not, were / were not</td>
<td>1.49</td>
</tr>
<tr>
<td>Other responses</td>
<td></td>
</tr>
<tr>
<td>True / false</td>
<td>20.76</td>
</tr>
<tr>
<td>Other</td>
<td>42.06</td>
</tr>
</tbody>
</table>

Thirdly, learners generally seemed to understand more than they could vocalise; this was demonstrated by a generalised capacity to understand the complex questions concerning key messages, even if learners struggled to form complex or novel responses. An example of comprehension of a complex interview and question, even in a class of lower speaking ability, was CEL4:

Learners were asked before the broadcast, ‘does Santo tell people he was HIV positive?’ The learners responded with ‘no, he does not’. After hearing the broadcast and discovering that Santo does tell people, they responded on second asking with, ‘yes, he does’ [CEL4].

This offers compelling evidence of learners elsewhere struggling to vocalise more than simple declaratives, but understanding and responding to fairly complex questions.

4.2.2.2. Teachers

It was observed that overall teacher quality was variable across states and classes. The general trend is that the most successful classes in terms of learner
engagement, and the extent to which learners responded correctly to questions, depended largely on the teacher. The classes observed to be best had high levels of discussion, judicious use of MT, the use of multiple examples and learner-directed learning:

The teacher asked the learners if they had any questions. The learners asked for clarification of the grammar point, ‘should’ and ‘should not’. The teacher explained the concept again, and then reinforced in MT. A learner then asked for a revision of the definition of one of the keywords, ‘profit’. The teacher invited other learners to offer definitions. A learner then explained, using an example. The teacher clarified that there was no concise translation into Zande, but referred back to MT to consolidate the meaning of the word [WEL1].

On the other hand, classes were less successful when the learners had to correct the teacher, in instances where the learners’ levels of English seemed to be higher than that of the teacher:

The teacher read out all of the questions and activities with pronunciation errors, which learners corrected, including:

/sɪŋɡə/ as /sɒŋə/
/drɪŋkɪŋ/ as /drʊŋkɪŋ/

Learners were expected to answer all questions before hearing the radio broadcasts. A learner prompted the teacher to start playing the radio. The majority of explanation was given in MT, despite high levels of learner comprehension and use of English. After the broadcast, the teacher asked whether the man interviewed was a singer. The learners correctly responded that ‘he is’, but the teacher corrected to ‘he can’. The learners then challenged this but the teacher went on to explain the use of ‘can’ and ‘cannot’, describing ‘can’ as the ‘positive, past tense’ [CEL5].

However, despite the teacher in CEL5 struggling with English, there was some facilitation of discussion around one of the key messages. This indicates that with the support of the radio and resources, a lower ability teacher can still sometimes facilitate discussion:
The teacher stimulated discussion on the roles of mothers and fathers in the family. Learners suggested that mothers protect their babies and talk to their children politely. Probing the role of the father, there was less response so the teacher suggested the role of giving advice, and learners agreed [CEL5].

Teachers who recognised the ability of their learners and tailored the focus of the lesson to either the vocabulary, grammar or key messages accordingly, demonstrated differing levels of MT usage. In CEL5, the teacher persisted in using large amounts of MT despite learners demonstrating reasonable fluency in English, whereas in WEL3, high usage was necessary given that the learners struggled with long and complex passages of English; instead, a focus was placed on the keywords. In almost all classes observed, and with only a few exceptions where teachers appeared to use MT to mask a lower ability to use English, MT was used to aid understanding, with the use of the first language differing depending on the level of the learners [Table 4.2].

Table 4.2. Selected examples of teacher use of MT.

Source: Author.

<table>
<thead>
<tr>
<th>Observation</th>
<th>Use of MT</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEL2</td>
<td>Teacher explained only complex elements in MT.</td>
</tr>
<tr>
<td>CEL3</td>
<td>When learners struggled with keywords, teacher reverted to MT to clarify.</td>
</tr>
<tr>
<td>WEL3</td>
<td>Majority of the lesson conducted in MT as learners struggled.</td>
</tr>
<tr>
<td>WEL5</td>
<td>Teacher went back and translated all keywords into MT for revision.</td>
</tr>
</tbody>
</table>

In general, there were a number of instances of learner error, which are to be expected in class settings. However, in a number of cases [Table 4.3.], teachers did not respond to these errors, but it was unclear whether this was an English proficiency or pedagogical issue.
Table 4.3. Selected examples of a lack of teacher response to learner errors.  
Source: Author.

<table>
<thead>
<tr>
<th>Observation</th>
<th>Learner error</th>
<th>Teacher response</th>
</tr>
</thead>
<tbody>
<tr>
<td>LSL2</td>
<td>Radio instructed learners to repeat twice. No learner response.</td>
<td>No response.</td>
</tr>
<tr>
<td>LSL3</td>
<td>Radio instructed learners to repeat questions. No learner response.</td>
<td>No response.</td>
</tr>
<tr>
<td>LSL3</td>
<td>‘Does he use a boat or a canoe?’ ‘Yes, he does’.</td>
<td>No response.</td>
</tr>
<tr>
<td>LSL3</td>
<td>‘Can a deaf person hear sounds?’ ‘Yes’.</td>
<td>No response.</td>
</tr>
<tr>
<td>WEL1</td>
<td>‘Should people learn business skills?’ ‘No’ (broadcast identified ‘yes’).</td>
<td>No response.</td>
</tr>
<tr>
<td>WEL3</td>
<td>Learners instructed to change present tense sentences into future sentences. No learner response.</td>
<td>No response.</td>
</tr>
<tr>
<td>WEL5</td>
<td>Only one learner responded to the activity after Interview 1.</td>
<td>No response.</td>
</tr>
</tbody>
</table>

Finally, teachers were given dictionaries to assist them with the vocabulary encountered in SU. However, there was evidence across all states that, if these dictionaries were still at the learning centre, they were not necessarily being used, alongside other evidence to suggest that some teachers did not prepare for classes, making errors in either the informational or linguistic content of the lesson [Table 4.4.].

Table 4.4. Selected examples of teacher errors.  
Source: Author.

<table>
<thead>
<tr>
<th>Observation</th>
<th>Form</th>
<th>Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEL3</td>
<td>Spoken</td>
<td>‘Nelson Mandela is the president of South Africa’</td>
</tr>
<tr>
<td>CEL4</td>
<td>Written</td>
<td>‘presiden’ [president]; ‘afect’ [affect]</td>
</tr>
<tr>
<td>WEL3</td>
<td>Written</td>
<td>‘spute sliver’ [spit saliva]</td>
</tr>
<tr>
<td>WEL4</td>
<td>Written</td>
<td>‘refree’ [referee]; ‘diarroea’ [diarrhoea]</td>
</tr>
<tr>
<td>WEL5</td>
<td>Written</td>
<td>‘currruption’ [corruption]</td>
</tr>
<tr>
<td>CEL6</td>
<td>Written</td>
<td>‘what is happening right now’ [what is happening right now]</td>
</tr>
</tbody>
</table>
4.3. Communities

There has been a shift from 2011-2013 in how the community is impacted by, and perceives, the SU programme given the cessation of live broadcasts and the move to MP3 stored media. This had led to a change in the benefits and constraints of the programme to the community.

4.3.1. Benefits and constraints of broadcasting in 2011-2012

There was widespread agreement amongst teachers and Outreach Officers that in the 2011-2012 cycle, the beneficiaries of the programme extended far beyond the classroom as a direct result of live broadcasts. In fact, ‘the community was one class’ (OO2). Those who were close to learners or knew people directly involved in the programme were especially likely to tune in. It was noted that

‘when it was broadcast over Yambio FM, all the community of Yambio were benefiting from the programme’ (OO5).

The main benefit was exposure to spoken English and some element of tuition during the programme. It also stimulated discussion over the key messages of the broadcasts. Given the level of English, broadcasts both included and attracted a diverse range of individuals above and beyond the target direct beneficiaries, seeking to improve their knowledge. On the one hand,

‘even officials...they join the radios in the instructed places and they listen to the lessons, in various places’ (OO4).

However, on the other, where the community was

‘not up to that level, [there was] no interest’ (OO2).

Highlighted was the importance of some central ‘teacher’ figure, with recognition that many learners required support during the broadcasts themselves:
‘People could understand some, and others would translate incomprehensible parts, so that the message could still be delivered’ (T2).

Two key constraints of broadcasting were identified as the nature of the broadcasts themselves, and South Sudanese logistical capacity to deliver them. As already identified, the level of English was often too high for many community members; in addition, a key part of the learning process was access to accompanying workbooks which listeners did not have. The South Sudanese context additionally rendered the process of broadcasting itself problematic. Alongside problems with reception, radio stations themselves were also at times responsible for errors in lesson selection and broadcast time:

‘those FM can forget and sometimes they can confuse putting another lesson instead of the other, that one confuses the classes’ (OO6).

Logistical issues, at times, reduced interest:

‘in the communities when I train, they are not interested...one of the reasons they were saying was at times, it was not clear, at certain places it was not clear’ (OO1).

Generally, there was widespread interest in the SU programme and in many communities a large number of willing learners, above and beyond the registered learners, would stand outside classrooms and listen to lessons.

4.3.2. Benefits and constraints of the move to MP3 stored media

The key constraint of the move to MP3 stored media was an immediate loss in the number and spread of indirect beneficiaries. Only registered learners in the classroom now directly benefit from the SU programme:

‘last year…all the community was benefiting from the programme, but this year, only those who joined the programme, where the radio is...they are the ones benefiting’ (OO5).
It was identified by Outreach Officers that there are more learners who would like to take part in the programme but resources are not available to allow them to do so in the current setup. Even when listeners in 2011-2012 might have struggled with the broadcasts alone, without the workbook, the broadcast itself was a freely available resource, and thus a way of engaging with, and potentially benefiting from, SU without directly taking part in classes. Additionally, as with literate learners listening to SU for improvement in spoken English, the benefit to them has also been lost.

The move to MP3 radios has brought many benefits for teachers and learners in the class, as discussed above. The benefits to the community are more indirect. It was identified that it is still the case that

‘the community appreciate the programme’ (OO5).

In addition, there are other programmes that are sometimes broadcast. Now, learners still communicate with others who cannot access the programme, particularly friends and family, which were key interested groups in 2011-2012:

‘they are discussing. Most of our people there, they are illiterate so they talk about it to their group’ (OO2).

Another element is the ability of learners to make their workbooks available so that others can learn from the written resources:

‘they do discuss it with their families, the way, they share it, especially those students with workbook…when they take it back to share with the others’ (OO6).

It was found that the extent to which SU is embedded in the community may influence the sustainability of the programme. Anecdotally, there were suggestions that where acceptance was high, and communities perceived a value in SU for learners and to an extent themselves, they might be willing to support the continuation of the programme if funding was to cease.
South Sudan is a fascinating context in which to interrogate IRI against Freirean pedagogy, to explore whether it can turn post-conflict educational challenges into opportunities, and work to meet them. Firstly, general IRI issues with respect to its operation in post-conflict contexts are discussed, as SU has grappled with this contextual difficulty over its two cycles. Secondly, each Objective is taken in turn, at which point Freire and IRI are discussed with reference to the results from the SU case study.

5.1. General IRI issues

The research echoes the literature in finding that radio is a popular medium for education, with widespread access. It is an attraction and motivation and it assists communication due to exposure to different accents. However, SU has experienced some of the problems of radio transmission documented elsewhere, highlighting the difficulty of maintaining the quality of an IRI programme in post-conflict and low infrastructure contexts. Not only is broadcast quality often poor, but there can be frequent errors with transmission and significant logistical issues when operating a programme predicated on live broadcasts. The move to MP3 stored media improves programme efficacy for learners, but loses the wider audience. The case of SU challenges the warning of Adkins (1999) that moving to stored media can increase complexity, which might prove harmful; teachers have adapted well to the change and now have much more flexibility in lesson delivery. It must be recognised, however, that the kinds of technologies becoming available in the intervening years have changed dramatically.

Given the finding of Dock (1999a) that educational radio programmes can fail if the content is too limited, or constrained by curriculum objectives, SU worked to avoid this by including a wide range of material, which in itself may be useful in the generation of the national curriculum. However, the World Bank (2005) also warned that many programmes are too ambitious and limited content is a better option. It was
found in this research that three separate interviews and key messages per lesson was too much for learners and erred on counterproductive. This problem is exacerbated if teachers, when clarifying or facilitating discussion, struggle to communicate or explain the messages clearly.

Given the tension as to whether SU is a literacy or language programme, it was found that there was potential for those literate in English to obtain benefit from the IRI in terms of improving speaking and listening skills, but more research would be necessary to investigate the impact of SU on reading and writing development.

The literature recognises the importance of targeting for IRI programmes, and SU has encountered challenges in identifying, enrolling and retaining its target audience. On the one hand, the attendance of primary school learners is a good thing as it not only highlights the perceived value of the programme, but provides support with English and may prevent drop-outs; on the other hand, many of these learners appear to be below the level of English required and consume resources intended for other learners.

The resultant enlarged variation in class ability places extra demands on the teacher to adapt lesson content and facilitate as required. SU was intended as an IRI for a niche population, with its level set accordingly; following the World Bank (2005), learner drop-out may be somewhat explained by a tension in maintaining interest given the level-ability disparity, stemming from the programme being targeted to a different population to the actual recipients. It must be remembered that the post-conflict context complicates targeting, not only due to the huge demand for any kind of education following conflict, but also the huge range in ages and educational experiences of potential learners.

Finally, the research has highlighted the importance of certification. Much of the literature focuses on the access and quality elements of IRI, but it is seen in the case of SU that learners invest time and energy into the programme and see the skills and formal recognition as both important. SU represents an educational opportunity for older learners, with formal recognition at completion, which was lacking before and even just after the CPA. There was anecdotal evidence that guaranteed certification,
with clarification as to at what level and how it would be comparable to other courses, would improve attendance.

5.2. Actual and perceived skills and knowledge acquired by learners

Freirean pedagogy, predicated upon a class of teacher-learners, sees benefits for learners both in terms of acquiring new and increased language skills, and the raising of critical consciousness, based on dialogue and discussion around key messages. How this plays out through IRI varies.

5.2.1. Language ability

The literature highlights how IRI can facilitate higher learner achievement. The research echoes this with respect to learners improving their English ability over the course of the programme. These language skills can afford new opportunities and in a Freirean sense, contribute to overcoming the impacts of oppression. It is noted that in the adult context, SU is sometimes the only means by which they can accessibly and reliably learn English, which in some cases fundamentally alters their ability to find work or enter further study. The World Bank (2005) recognises the impact of cumulative study though, whereas SU is a six-month one-off programme. This highlights an issue for close consideration.

However, SU demonstrates perfectly the concern of Friend (1998) that given different abilities in classes and the oral nature of many interactions, it is difficult to identify incorrect answers and struggling learners. In addition, SU has provided evidence that the design of IRI programmes can be problematic in that where the level is above that of the learners, they may give by-rote answers, reducing the value of the interactivity aspect.

Whilst generally in interviews, particularly with teachers, it was perceived that learners had few problems with the English in SU, Outreach Officers recognised that a portion of many classes struggle, and observation supported this. There is a danger that this difference in opinion manifests itself in teachers ignoring the struggling element. Thus, because of the very nature of IRI, whilst it increases access, quality
and engagement, it facilitates language learning for some, but can hide the difficulties of others.

5.2.2. Key messages

With regards to key messages, there was general consensus that learners understand those held within the broadcasts, as they are generally able to answer questions about them. The prompts for discussion are all locked inside the resources, evolving from the South Sudanese context. In reality, whilst Freirean pedagogy and the IRI approach both hold that learners can learn through dialogue and discussion, this research shows that the extent to which learners can have these discussions seems to largely depend on the capacity of the teacher to facilitate.

In the case of SU, given the huge variety in levels of discussion in classes observed, and the weight of responsibility on the teacher in many instances to actually teach or ensure that meaning has been transferred, it is likely that the direct instruction, either from the teacher or radio, rather than the discussion element of classes, stimulates language learning.

It has been seen that exposure to radio material is valuable as learners can perhaps understand more than they can vocalise. In addition, the seeming difficulty of learners to respond to oral questions may actually be a symptom of the rapidity with which they are forced to answer during the broadcast; thinking time is limited, before an answer is required and it is possible that the next question has arrived before the first has been mentally and audibly answered.

It is important to acknowledge that classes where answers were given quickly and correctly may have been influenced by the pre-warning of the visit, as the teacher had time to prepare learners [Box 5.1.].

Potential learner preparedness

In one instance [WE5], content on the board was pre-written and all learners seated and waiting. Once the lesson began, the learners answered questions from the board
with greater rapidity, complexity and accuracy than any later questions, raising the possibility that the teacher had already run through the activity before the arrival of the researcher.

Box 5.1. Potential for learner preparedness given pre-warned teachers.
*Source: Author.*

After listening, the large written element of SU after the broadcast is a useful tool for consolidation, but its efficacy is often influenced by the ability of the teacher to facilitate its completion.

The research highlighted that there is some element of discussion amongst learners, and transfer of knowledge from learners to the community. However, without live broadcasts, IRI relies on the pro-activity of the individual learner to go and share, rather than facilitating a wider community discussion in its own right. For Freire, this sense of activism would be most likely to manifest itself after development of an individual’s critical consciousness, and the concomitant obligation to act. Thus, this suggests, that for an IRI on stored media, benefits would have to accrue significantly in the individual learner before they would spread widely into the community.

Generally, there was clear evidence of the desire to learn English and an IRI is facilitating this learning. In a Freirean sense, this is allowing learners to move out of a state of linguistic oppression, at the same time sometimes providing a space to discuss key messages and raise critical consciousness; the opportunity for, and impact of, this discussion, however, seems to depend on the capacity of the teacher to facilitate.

### 5.3. Teacher involvement in SU

Low teacher capacity was recognised by a number of participants but an improvement was noted from 2012-2013, in particular after more training had been given. Overall, teachers were found generally to be able to cope with the level of English in the programme.
5.3.1. Teacher or facilitator

In order to reduce the impact of low capacity, and help develop it, both Freirean pedagogy and the IRI approach hold that the teacher should be more of a facilitator learning alongside the learners. Reflecting this in the case of SU, the teacher was seen by many as a facilitator, with the key teaching coming from the radio, as the learners and teacher all learned together.

It was found that this aspect of SU allows some aspects of low teacher capacity to be absorbed by the radio, thus indicating that IRI can to some extent raise educational quality, independent of any issues with teaching quality. The lessons observed to be most successful, particularly in terms of learner engagement, were those where the teacher played a high facilitator role, asking questions and stimulating discussion such that the class became a group of teacher-learners, much as Freirean pedagogy envisages.

Nevertheless, the teacher-learner dichotomy was reduced most significantly when teachers tailored the lesson content to the learners’ ability, or invited learners to critique the answers of others, to illuminate language errors or differences in opinion over messages. Indeed, successful facilitation in general demonstrated considerable pedagogical skill, and often, the teachers most adept at this also had the best levels of English language ability, giving them the flexibility and ability to manipulate the lesson and resources to best suit the learners. This highlights a tension as to whether the best facilitators are in fact just the best teachers or at the least, have the highest English language ability.

In saying this, it was noted that teachers who struggled with the English aspect in some instances still managed to facilitate discussion following the radio broadcasts. If not this, then they at least facilitated the workbook-based after-listening activities, supported by the radio material and teacher guidebook. Either way, the research thus supports the assertion of the World Bank (2005) that a teacher or advanced mentor is an integral part of an IRI programme.

At the same time, SU offers evidence that critiques the view of Dock and Helwig (1999) that the distant teacher carries the main weight of teaching. In fact, mirroring
Helwig et al. (1999), it finds that IRI is increasingly affording the teacher more freedom and responsibility, which in turn requires greater pedagogical skill, moving away from the Freirean concept of the facilitator.

Firstly, the effective use of MT by teachers is a freedom given by SU and can significantly influence learner understanding. Secondly, particularly in the first half hour of the lesson in the case of SU, the programme demands that the teacher takes on an overtly teaching, rather than facilitating, role. This was often observed to be the weakest portion of the lesson.

It is possible that the teaching role is accentuated in SU given the high level of the content of the broadcast. In other words, the IRI broadcast does carry the main weight of teaching, but in the SU case, is often so complex and sometimes above the level of learners, that the role of the teacher becomes to make sense of it for the class. This not only moves the teacher away from the Freirean facilitator to overt teacher, but impacts on learners if teacher ability is low [Figure 5.1.]; however, this may be as a result of SU targeting difficulties, wide differences in class ability and high content level, rather than a widespread issue with IRI per se.

![Figure 5.1. Conceptual teacher/facilitator balance in relation to class ability. Source: Author.](image-url)

However, an important caveat with all of this discussion of teachers is the possibility of changed teacher performance due to the presence of a researcher. Nevertheless, in speaking with project staff who make regular visits, the use of the teacher
guidebook, operation of the radio and general teaching style at most observations was perceived as largely comparable to that of other lessons. Nevertheless, and despite clarification that it was not a monitoring and evaluation exercise, teachers in particular, but learners also, may have modified their behaviour as a result of the researcher’s presence.

5.3.2. IRI-based teacher training

When teachers did not correct learner errors, particularly during the broadcast, this exposed a question as to whether teachers generally are trained enough to know when to jump from teacher, to listener during the broadcast, to activity facilitator after. The SU radio broadcast does not concern itself with teacher training, but does to some extent offer assistance with facilitation. There was certainly evidence from interview that teachers, in a Freirean concept of teacher-learners, improve their own ability as a result of participation in SU; this may come more from delivering lessons, facilitating discussion, and learning alongside learners, than direct broadcast-led pedagogical training.

5.4. Community impacts of SU

The research followed the findings of the World Bank (2005) that IRI programmes can contribute to informal learning. When broadcast, community members had exposure to the English language and some element of tuition, but given the high level of SU, where understanding was low, interest was also understandably low. There was some evidence that communities gathered, listened to the broadcasts and then discussed the key messages in the first cycle. Nevertheless, there was recognition that some kind of facilitator figure was still required in many instances for the real meaning to be elucidated.

Given the logistical problems and high level of English, evidence is much weaker that IRI can work for Freirean-style raising of critical consciousness or lifting the impacts of linguistic oppression on such a wide scale. This is particularly true once the broadcasts move onto MP3 or other stored media, as the shadow audience is entirely lost.
Implicit in the literature but seldom highlighted is the importance of the tension in readjusting the weight of emphasis of IRI programmes. In consolidating benefits for learners in the classroom by halting broadcasts, the wider audience is shut off aside from pro-active learners communicating with other community members [Figure 5.2.].

![Figure 5.2. Shift in benefit for learners and the community in the move to MP3 stored media.](image)

*Source: Author.*

There is a concomitant risk that the further the wider community is removed from the impact of the programme, the less likely they are to contribute to its continuation should funding stop; this, of course, notwithstanding those members directly connected to the programme through learners in the household. Even then, there is no guarantee that content is communicated. In saying that, the teacher has been trained and in many cases will, by the end of 2013, have delivered SU twice, whilst the radio containing all the content is rechargeable. Thus, the community has the fundamental resources necessary for the continuation of the programme, if they so desire. SU has considered sustainability and institutionalisation of the programme from the outset.

What the research has highlighted is that the benefit to the learner of an IRI programme does not depend on the broadcast itself; it is the information contained within it, the accompanying resources and activities, and the discussion facilitated by the teacher. However, for the wider community, the broadcast itself is the value of the programme. Ideas and knowledge can be shared whilst listening on the way to work, in the office or at a community gathering. This method of expanding language skills.
and stimulating discussion to overcome the impacts of oppression is lost with the move to MP3 stored media and is a major constraint, particularly given the South Sudan context where vast amounts of people require the development of English skills quickly. Whilst entirely understandable, access to English language education and its associated discussion on key messages becomes trapped in the ability to register for classes, with associated barriers such as time to attend, ability to understand and acceptance on registers.

A major limitation of this aspect of the research was the lack of community visits and focus group discussions, as justified in the research methodology. Only this way can perceptions of community impacts truly be accessed.
6 Recommendations

6.1. Programmatically

6.1.1. Resources

- Heed the warning of the World Bank (2005) with regards to limiting lesson content, as the research has provided evidence that three interviews per lesson is perceived as too much information and greater benefit could be obtained from a more focussed approach. Given the radio broadcasts are complete and stored on the MP3 stored media, this could be achieved by:
  - Playing two of the three interviews.
  - Refining the workbooks to reflect two of the broadcasts more in-depth.

- Work to diversify the workbooks to allow for extension work or develop associated skills by:
  - Transcribing some interviews containing key messages (e.g. health, sanitation, South Sudan) as a basis for learner revision and comprehension activities.
  - Reconciling whether SU is a literacy or language programme, and adjusting the weight of reading and writing within the learner workbook accordingly.

6.1.2. Targeting and certification

- Work to ensure that the next SU cohort better matches the original target audience, in order to fill the educational niche. This can in part be achieved by:
  - Guaranteeing prompt certification at the completion of SU.
  - Clarifying and codifying the level at which SU is certified, in order for learners to be able to understand where completion of the programme will leave them, with regards to qualification for employment and comparative educational level.
6.2. Operationally

6.2.1. Learners

- Work to identify struggling learners within the class, as they can become hidden within the IRI programme, by:
  - Introducing compulsory hand-in of certain existing, or new, exercises from the learner workbook.
  - Training teachers to better identify, assist and encourage struggling learners.

- Develop a plan to support learners post-SU, considering the findings of the World Bank (2005) with regards to IRI benefit being dependent upon cumulative study.

6.2.2. Teachers

- As a key recommendation, build teacher capacity to assist in the delivery of SU by:
  - Clearly delineating teacher role at each stage of the SU lesson.
  - Developing pedagogical and facilitation skills through a dual-centric curriculum by building this into training, using mock SU lessons to map the shift in weight on classroom teacher to distant teacher and back again.
  - Supporting lower ability teachers by increasing the facilitation aspect of the first half of lessons, by emphasising the use of MT for understanding and discussion of concepts and messages at this stage.
  - Testing prospective teachers against SU content at the recruitment stage, to ensure that they can cope with the level of English.

- Provide ongoing support to teachers by:
  - Briefing Outreach Officers on their role with regards to observation, advice, training and intervention in cases of teacher difficulty during lessons.
  - Holding regular training, at state level, reinforcing pedagogical skills and discussing forthcoming lesson content.
6.2.3. Communities

- **Determine the role of the community in SU by:**
  - Recognising that the weight of benefit has shifted to the individual learner.
  - Conducting an assessment of changing community impact, perhaps as part of the evaluation of the 2013 cycle.

- **Consider restarting live broadcasts,** ideally as a supplement to lessons delivered with stored media, in order to capture a shadow audience of listeners.
Conclusion

At independence, South Sudan was posed with many challenges. In education, there was a huge portion of the population that needed catering for, young and old. In a low infrastructure context, two key challenges were low teaching capacity, and the impacts of physical and linguistic oppression.

IRI, at least in theory, is an approach suited to dealing with both of these challenges. When seen through a lens of Freirean pedagogy, it has the potential to transform them into opportunities, and work towards meeting them. This research, through a case study of SU, has highlighted the importance of context in the potential success of IRI, not least in the logistical ability to broadcast radio programmes, which has led to a move to stored media, resulting in new benefits and constraints to the target audience.

At the level of the learner, IRI can improve English language ability but, particularly in contexts where there are large numbers of school drop-outs, there is massive variation in terms of learner ability within classes and it is difficult to target an IRI programme to meet all of these levels. In SU, learners can generally understand the key messages in broadcasts, but the extent to which they can engage with and discuss them, and thus raise their own critical consciousness, is largely dependent on the ability of the teacher to facilitate that discussion.

Additionally, it is the pro-activity of the individual learner that determines whether he or she discusses SU content with the community; this first requires significant raising of critical consciousness in the learner such that information sharing becomes a possibility, or a Freirean obligation. IRI through stored media must focus on the benefits on the individual, before hoping for widespread benefits in the community.

The key finding of the research is that the success of an IRI, and indeed SU, is almost entirely dependent on the capacity of the teacher. In the case of South Sudan, the teacher is recognised as a facilitator, exactly as the IRI approach and Freirean pedagogy envisage. However, the research exposed a tension as to whether the best
facilitators are in fact just the best teachers, in either their level of English or pedagogical ability. Nevertheless, there was some evidence that lower ability teachers can facilitate discussion or at least after-listening activities with the support of the radio and resources.

Furthermore, given mixed class ability, partly due to targeting issues and the high content level, SU requires the teacher to take on a more overt teacher role. Where teacher capacity is lacking and class ability is low, this creates a gap between the required balance of teaching and facilitation and the actual balance in practice.

Encouragingly, SU demonstrates the applicability of Freirean-style teacher-learner learning in low capacity contexts, both at the levels of English and key messages; the practice of this dual learning was both noted by interviewees, and observed in classes.

At the level of the community, there was some anecdotal evidence that when SU was broadcast over radio, there was an opportunity to learn English and discuss key messages. However, in the move to MP3 stored media, the benefit of SU to the wider community was largely lost. This exposed the key tension in many IRI programmes where, due to context, a decision must be taken to balance the relative benefits and constraints to the learner and community. Moving to stored media clearly prioritises the learner in the classroom. Whilst this is wholly justifiable given the learners in the classroom are the key target audience, it also poses a risk to community-led sustainability of the programme, given reduced engagement.

Ultimately, it has been shown that IRI has huge potential, when seen through Freirean pedagogy, to transform post-conflict educational challenges into opportunities. When working to meet them, it is logistical issues as a result of context that impact on the ability of communities to engage. Most significantly, it has been seen that low teaching capacity is both an opportunity to stimulate teacher-learner learning, but also potentially the biggest barrier to success. Indeed, it is the centrality of the teacher-facilitator figure that largely determines the benefits and constraints of an IRI to the key audience: the learners.
References


### LESSON 15

**Language summary:** Future tenses, using both “going to” and “will”

<table>
<thead>
<tr>
<th>Going to = a plan</th>
<th>Will = a decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>I’m going to use food for growth</td>
<td>I’ll go to the market tomorrow.</td>
</tr>
<tr>
<td>I’m going to buy some land</td>
<td>I’ll build a house or plant some crops</td>
</tr>
<tr>
<td>Question + going to</td>
<td>Question + will</td>
</tr>
<tr>
<td>What are you going to do today?</td>
<td>What will you do today?</td>
</tr>
<tr>
<td>Answer + going to + will</td>
<td></td>
</tr>
<tr>
<td>I’m going to do some work, and then I’ll get some food.</td>
<td></td>
</tr>
</tbody>
</table>

**Activities to Do While Listening**

**Item 1:** 
**Food for Growth**

**Key Words**
- nutrients
- proteins
- vitamins
- strong
- weak

**Questions**

*Say the answers out loud.*

1. Is food for growth the nutrients the body needs?
2. Are there proteins and vitamins in food for growth?
3. Where will she get the food for growth from?
4. Is she going to prepare the food for growth?
5. What is the benefit her people are going to get from food for growth?

**Activity**

*Say the answers out loud.*

a) *Repeat these questions after Zuhur*

- What are you going to eat?
- What are you going to drink?
- What are you going to buy?
- What are you going to study?
### b) Make up the questions for these answers

**Examples:**

<table>
<thead>
<tr>
<th>Answer</th>
<th>Question form: ‘What...’</th>
</tr>
</thead>
<tbody>
<tr>
<td>I’m going to eat some potatoes. I’m going to buy seeds.</td>
<td>What are you going to eat? What are you going to buy?</td>
</tr>
</tbody>
</table>

I’m going to buy some land. →

I’m going to drink some water. →

I’m going to study English. →

I’m going to get some goods. →

---

**Item 2: Child Abduction**

**Key Words**

slavery  abduction  painful  lose

**Questions**

*Say the answers out loud.*

1. Does the father want the government to help?
2. What will a child lose when he is abducted?
3. Are the effects on the parents painful?
4. Is slavery against human rights?
5. Is it important to have good security?

---

**Item 3: Sports in School**

**Key Words**

sport  encourage  athletics  talent  training

**Questions**

*Say the answers out loud.*

1. Do they have a plan for sports in school?
2. Is football for boys or is it for boys and girls?
3. Will they have athletics in school?
4. What do they want to search for?
5. What training are they going to have?
Activities to Do After Listening

Activity 1: making decisions
*With a partner: practice asking and answering these questions.*

1. When will you start? → I’ll start now.
2. When will you read the information? → I’ll start next week.
3. When will you tell him?
4. When will you speak to her?
5. When will you look for work?
6. When will you pay for it?
7. When will you take the test?

Activity 2: using the word ‘will’ for ideas
*Add ‘will’ + the verb*

1. I think I ........... to the market later. *(go)*

............. I think I’ll go to the market later..............................

2. She thinks she ................. here tomorrow. *(be)*

........................................................................

3. They think they ..................... football next week. *(play)*

........................................................................

4. The teacher thinks the students ..................... *(improve)*

........................................................................

5. The government thinks a lot of people ................... *(vote)*

........................................................................
6. The farmer thinks his crops ....................... (grow)

                      

Activity 3
Fill in the missing words

1. There are ..................... and .....................

    in food for growth. If you eat food for growth,

    you will be ......................

2. ........................................ is against human rights.

    Child ................................ is ..................... for parents.

3. It is important to ..................... children to

    play sport. Teachers will have ..................... to

    help them teach sport in schools.

Words to choose from:

vitamins
training
healthy
proteins
abduction
painful
abduction
encourage
### LESSON 15

#### Lesson Topics

**Interview 1: Food for Growth.**
Key words: nutrients, proteins, vitamins, strong, weak.

**Interview 2: Child Abduction.**
Key words: slavery, abduction, abduct, painful, lose.

**Interview 3: Sports in School.**
Key words: sport, encourage, athletics, talent, training.

#### Lesson Aim
To continue learning about the future tense by using both ‘going to’ and ‘will’.

#### Lesson Preparation: On the Blackboard

**A. Write key words on the board:**

```
Nutrients proteins vitamins strong weak slavery abduction abduct painful lose sport encourage athletics talent training
```

**B. Future tenses, using both ‘going to’ and ‘will’: refer to learners workbook**

#### BEFORE the radio programme (30 minutes – 1 hour)

**A. Introduce key words and cover activities on the blackboard**

**B. Read out loud the ‘while listening’ questions and discuss with class.**

#### DURING the radio programme (30 minutes)

30 minutes radio teaching time

---

**TAKE A BREAK**
AFTER the radio programme (30 minutes – 1 hour)  
See Learners’ Workbook  
Listening and Speaking:  

Learners practise saying the key words from the lesson.  
Check learners are saying the words correctly.  

Activity 1. Learners’ Workbook: paired spoken work  

Reading and Writing:  

Learners paired work to practice spelling the key words  

Activity 2. Learners’ Workbook: written work  

Answers  
1. I think I’ll go to the market later. (go)  
2. She thinks she’ll be here tomorrow. (be)  
3. They think they’ll play football next week. (play)  
4. The teacher thinks the students will improve. (improve)  
5. The government thinks a lot of people will vote. (vote)  
6. The farmer thinks his crops will grow. (grow)  

Understanding  

Activity 3. Learners’ Workbook: written work + class discussion  

Answers  
1. There are vitamins and proteins in food for growth. If you eat food for growth, you will be healthy.  
2. Abduction is against human rights. Child abduction is painful for parents.  
3. It is important to encourage children to play sport. Teachers will have training to help them teach sport in schools.
Appendix III: List of lesson topics

Lesson 1  a cattle keeper; a mother who cooks; a teacher who teaches football.
Lesson 2  a market stall; different cultures in South Sudan; wildlife.
Lesson 3  a blind person; a family; water.
Lesson 4  a basketball player; girls going to school; Juba.
Lesson 5  a fisherman; deafness; HIV/AIDS.
Lesson 6  a first aid nurse; a farmer; John Garang.
Lesson 7  the last meal; a voter; a small business.
Lesson 8  being HIV positive; a story of Creation; Nelson Mandela.
Lesson 9  the Crop Cycle; malnutrition; women in politics.
Lesson 10 n/a.
Lesson 11 breastfeeding; soil erosion; malaria.
Lesson 12 clean water; beekeeping; girls’ education.
Lesson 13 after university; a returnee; choosing a husband.
Lesson 14 food for energy; a small business; a disabled child.
Lesson 15 food for growth; child abduction; sports in school.
Lesson 16 food for health; motherhood; Dinka traditional dress.
Lesson 17 corruption; oil and the environment; keeping goats.
Lesson 18 the rainy season; the restaurant; typhoid.
Lesson 19 the rules of football; a small business; cholera.
Lesson 20 n/a/
Lesson 21 latrines; the Right to Security; women’s cooperatives.
Lesson 22 fishing; the National Assembly; violence against women.
Lesson 23 Nuer storytelling; trees and forestry; cattle raiding.
Lesson 24 charcoal burning; myths about disability; the role of the President.
Lesson 25 trachoma; waste disposal; the striker in football.
Lesson 26 oil seeds; conjunctivitis; the defender in football.
Lesson 27 the goalkeeper in football; river blindness; Azande culture.
Lesson 28 good leadership; different breeds of poultry; good and bad decisions.
Lesson 29 the basketball team; food and body building; the old soldier.
Lesson 30 n/a.
Lesson 31 disability and landmines; guinea worm disease; cultural ceremony.
Lesson 32  volleyball; the role of the police; keeping animals in the dry season.
Lesson 33  a sewing business; gender-based violence; polio.
Lesson 34  accidents on the roads of Juba; husband and wife relationships; rock breaking.
Lesson 35  feeding children; child labour; Bari weddings.
Lesson 36  a Bari story; wrestling; acquiring land.
Lesson 37  alcohol abuse; agricultural produce-price changes; the voting system.
Lesson 38  home security; myths about infertility; food habits.
Lesson 39  the village shop; the village chief; a blind person’s marriage options.
Lesson 40  n/a.
Lesson 41  ox plough; dumping waste; campaigns in elections.
Lesson 42  street children; a County Commissioner; caring for a relative.
Lesson 43  an athlete; a blacksmith; naming a child.
Lesson 44  disabilities; over-cultivation; cultures.
Lesson 45  art activities; widows; respect in the family.
Lesson 46  subsistence farming; a balanced diet; an ordinary citizen in politics.
Lesson 47  the role of the nurse; human excrement; watching football.
Lesson 48  malaria; human rights for women; growing crops.
Lesson 49  speaking English; choosing the right business; a child’s rights.

Colour key

Environment; Health; Livelihoods; Nutrition; Politics; Rights; Sanitation; South Sudan; Sport.
Appendix IV: Learner interview guide

Involvement in SU

1. Length of involvement.

2. Other learning experiences.

3. Level of English before SU.

Skills and knowledge

4. Skills or knowledge as a result of participation in SU.

5. English ability as a result of SU.
   
   Prompt for: how and why?

   
   Prompt for: further learning?

Learning

7. Coping with the level of English in SU.
   
   Prompt for: other learners?

8. Literacy in any other language.
   
   Prompt for: useful in learning English?

   
   Prompt for: effective way to learn?; what could have made it more effective?; enough time on reading and writing?; understand the key messages?; changed
understanding of other South Sudan cultures?; advantages and disadvantages of SU compared to other English language programmes.

10. Biggest challenges to learners in the classroom in South Sudan.
   Prompt for: main challenges to learning English.

11. Teachers able to cope with the English in SU.

Communities

12. Communication with friends and family about SU.

13. Playing of broadcasts in the community.

   Prompt for: did people learn from them?; did people understand the key messages?; did it increase understanding of other South Sudan cultures?

15. Increasing the wider impact of SU.

SU

16. Best parts of SU.

17. Weakest parts of SU.

18. Changes to improve SU.
   Prompt for: broadcasts; learner workbook.
Appendix V: Teacher interview guide

Involvement in SU

1. Length of involvement.

Skills and knowledge

2. Skills or knowledge as a result of participation in SU.

3. English ability as a result of SU.
   
   Prompt for: how and why?

4. Training from AET
   
   Prompt for: enough?; has it changed teaching style?; what else would training be useful on?

5. Biggest challenges to teachers in the classroom in South Sudan.
   
   Prompt for: main challenges to teaching English.

Learners

6. Coping with the level of English in SU.

7. Learner MT ability.
   
   Prompt for: role of MT in SU.

8. Learner improvement.
   
   Prompt for: benefits to last year’s learners.

Prompt for: effective way to teach?; effective way to learn?; what could make it more effective?; enough time on reading and writing?; do learners understand the key messages?; advantages and disadvantages of SU compared to other English language programmes.

10. Biggest challenges to learners in the classroom in South Sudan.
   Prompt for: main challenges to learning English.

Communities

11. Playing of broadcasts in the community.

12. Impact of broadcasts in the community.
   Prompt for: did people learn from them?; did people understand the key messages?; did it increase understanding of other South Sudan cultures?

13. Increasing the wider impact of SU.

SU

14. Comparing last year and this year.

15. Best parts of SU.

16. Weakest parts of SU.

17. Changes to improve SU.
   Prompt for: broadcasts; learner workbook; teacher guide.
Appendix VI: Outreach Officer interview guide

Involvement in SU

1. Length of involvement.

2. Number of centres and classes.

At centres

3. Learners coping with the level of English in SU.

4. Learner MT ability.
   *Prompt for: role of MT in SU.*

5. Learner improvement.
   *Prompt for: benefits to last year’s learners.*


7. Advantages and disadvantages of using a radio for learning English.
   *Prompt for: effective way to teach?; effective way to learn?; what could make it more effective?; enough time on reading and writing?; do learners understand the key messages?; advantages and disadvantages of SU compared to other English language programmes.*

8. Biggest challenges to learners in the classroom in South Sudan.
   *Prompt for: main challenges to learning English.*

9. Biggest challenges to teachers in the classroom in South Sudan.
   *Prompt for: main challenges to teaching English.*
10. Teachers able to cope with the English in SU.

*Prompt for: enough training?; what else would training be useful on?; does SU training improve their capacity as teachers?*

**Communities**

11. Impact of broadcasts in the community.

*Prompt for: did people learn from them?; did people understand the key messages?; did it increase understanding of other South Sudan cultures?*

12. Increasing the wider impact of SU.

**SU**

13. Comparing last year and this year.

14. Best parts of SU.

15. Weakest parts of SU.

16. Changes to improve SU.

*Prompt for: broadcasts; learner workbook; teacher guide.*
PARTICIPANT INFORMATION SHEET, May 2013

CONFIDENTIAL

Can interactive radio instruction turn post-conflict educational challenges into opportunities?
A Case Study of the ‘Speak Up!’ English language programme in South Sudan.

You are being invited to participate in a research study. Before you decide whether to participate, it is important for you to understand why the research is being done and what it will involve. Please take time to listen to the following information carefully and feel free to ask if you would like more information or if there is anything that you do not understand. Please also feel free to discuss this with your friends and relatives if you wish. We would like to stress that you do not have to accept this invitation and should only agree to take part if you want to.

Thank you for reading or listening to this.

What is the purpose of this study?
This research investigates the extent to which the ‘Speak Up!’ English language programme is facilitating participatory skill and knowledge development, and community engagement. It explores how the programme was developed, the experiences of learners, teachers and outreach officers.

Why have I been chosen to take part?
The research includes learners, teachers and outreach officers to understand the programme from the perspective of those delivering and those taking part in the ‘Speak Up!’ programme. 4-5 learners, 4-5 teachers and 4-6 outreach officers are being interviewed, and a number of ‘Speak Up!’ classes are also being observed.

Do I have to take part?
Participation is voluntary and you are free to withdraw at any time without explanation and to no disadvantage.

What will happen if I take part in an interview or focus group?
Interviews will last around 30 minutes. The researcher is Robert Simpson. In interviews, you may choose not to answer any particular question, or end the interview at any time. Contributions will be recorded. All information will be confidential.

What will happen if I take part in a class observation?
Class observations will consist of the researcher spending the duration of the class at the back of the room listening to the teacher, learners and radio broadcast, to see how a ‘Speak Up!’ class works. The observation is to see how the teacher guides the activity, what the learner workbook is used with the radio, how the class participates, and if there are any problems that prevent the class running smoothly, and is therefore an evaluation of whether the teacher is delivering as intended. The researcher will be taking notes but nothing will be recorded and the class will proceed entirely as normal. The teacher and learners will not know of the researcher or answer questions. You may request for the observation to end at any time.

Do I get expenses or payment?
There are no expenses or payment for this study.

Are there any risks in taking part?
There are no known risks in taking part. If you feel uncomfortable at any point, you should let the researcher know immediately.

Are there any benefits in taking part?
The research seeks to find out what is working, and what could be improved in the programme you are part of. Any information you give is confidential and anonymous, but changes that could improve the programme may come about from your views and experiences.

What if I am unhappy or there is a problem?
If you are unhappy, or if there is a problem, please feel free to let the researcher know.

Will my participation be kept confidential?
All information you give will be captured, stored and processed anonymously, and saved in password-protected computer files. It will be used for this project only and destroyed after three years. Only the researcher will have access to the information, but the final research report with all contributions anonymous, will be made available to the Liverpool School of Tropical Medicine, and Africa Educational Trust.

What will happen to the results of the study?
Details of the results will be made available through Africa Educational Trust. You will not be identifiable from the results unless you have consented to being so.

What will happen if I want to stop taking part?
You can withdraw at any time, without explanation. Results up to the point of withdrawal may still be used, but you can request that they be destroyed and no further use is made of them.

Who can I contact if I have further questions?
You can contact Robert Simpson on 0644 796 607 (a.simpson@lju.ac.uk).
Appendix VIII: Participant consent form

CONSENT FORM
CONFIDENTIAL

Can Interactive Radio Instruction turn post-conflict educational challenges into opportunities?
A Case Study of the ‘Speak Up!’ English language programme in South Sudan.

Participant Identification Number for this Study:

I confirm I have read or heard, and understood the information sheet for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily. I understand that participation in this study is voluntary and I am free to withdraw consent at any time, without giving a reason, without any penalties.

Initial box: [ ]

I am a:
Teacher □
Learner □
Outreach officer □

I agree to be observed in class □

Name of participant ___________________________ Date __________ Signature __________

Name of person taking Consent ___________________________ Date __________ Signature __________
Appendix IX: Interview and observation codes

Interview

L Learner
T Teacher
OO Outreach Officer

Followed by a number, to indicate interview chronologically

e.g.
OO4 Outreach Officer 4

Observation

CE Central Equatoria
LS Lakes State
WE Western Equatoria

Followed by a number, to indicate observation chronologically

e.g.
WE4 Western Equatoria 4