Annotated Bibliography:

How can adult literacy (and especially calculus/numerical literacy) contribute to improved household economy (livelihoods)?

This article outlines a study in sub-Saharan Africa, by the Institute for International Cooperation of the German Adult Education Association (DVV International), to assess “the most effective strategies and methods for ensuring that the skills of literacy and numeracy do support the struggles of the very poor to develop livelihoods sufficient to lift themselves out of poverty” (Oxenham, 2002:20). The study examines two broad approaches to combining livelihood training and literacy instruction. The first approach looks at enriching a livelihood-led programme with calculating, writing and reading components. The second approach looks at enriching a literacy-led programme with training for livelihood skills. The researchers examined the impact of these approaches on: student loyalty and achievement; acquisition of livelihood and literacy/numeracy skills; and well-being. Their findings suggest that programmes that start from the learning of livelihoods skills are more likely to be successful. They demonstrate to participants an immediate reason for learning, whereas the benefits of a solely literacy based programme are initially harder to show to participants. The study also identified what contributes to the likelihood of programme success. One factor is using literacy/numeracy content drawn from livelihood skills and integrated with livelihood training from the start. Other factors include providing training in savings, credit, and business management, and actual access to credit.

This 2002 article has been cited 95 times in other scholarly articles, and is an essential source for the DCR adult literacy research group. The paper validates the importance of improving literacy and numeracy skills to benefit rural livelihoods. Though the study does not explicitly address the question of how adult literacy contributes to improved livelihoods, it gives practical guidance on features to include in programmes aiming to meet both literacy and livelihood goals. (For example, that 360 hours of tuition is needed for learners to retain new learning). The article also comments on broader issues such as the role of NGOs. The study’s use of mainly unpublished material means that it takes account of ‘on the ground’ experience not previously available. However, as the study included only limited field observations, the authors view the findings as “reasonable hypotheses” rather than facts. Overall, the report is clearly presented with useful sub-headings and detailed information to support its conclusions. The 40 years’ experience DVV International has in adult literacy in an international context adds credibility to the article. Specific programmes referred to in the article, where these are still operating, may be useful as possible models for effective literacy for livelihoods programmes.

This paper is publicly accessible at:

This study uses a longitudinal impact evaluation with quasi-experimental methods and qualitative approaches to evaluate a Farmer Field Schools (FFSs) project. This project was funded by IFAD and implemented by FAO and local government ministries in Kenya, Tanzania, and Uganda in 1999 - 2008. The study examines participation in and outcomes of FFSs on poverty, gender, and productivity. It also looks at the role that household-capital-endowment-level social characteristics play in access to and benefits of the FFS approach. The study found that FFSs were especially beneficial to women, people with low literacy levels, and farmers with medium sized holdings. FFSs improved income and productivity overall though differences were seen at country level. Participants also had significant differences in outcomes with respect to value of crops produced per acre, livestock value gain per capita and agricultural income per capita. The authors conclude that FFSs are effective in a variety of situations, especially when they take account of the local policy environment, farming systems and capacity of service providers and communities.

The rigorous approach used in this study by an international agricultural research centre contributes useful information on the effectiveness of FFSs on farmers’ productivity and poverty. It does not, however, shed much light on what factors may have contributed to FFSs benefiting some groups significantly more than others. Designed more for donors and policy makers than development practitioners, this paper does not explicitly address the contribution of literacy to farmers’ livelihoods. However, some of the study’s findings suggest that examining the FFS approach may help DCR’s adult literacy research group to develop more effective and inclusive programmes that meet their research objectives. For example, the study found that FFSs had a positive impact on income and productivity for women and for those who have a low level of literacy. They also had a positive impact on income and productivity for participants farming medium-sized land areas but an insignificant impact on income and productivity for people with small-sized land holdings (DCR’s target group?). The paper is presented as a scientific report with logical sub-headings and the results are accompanied by numerous detailed tables and graphs. This affects the flow of the paper. An extensive reference list offers further material on FFSs, agricultural extension and research methodology.

This paper is publicly accessible at: [http://www.ifpri.org/sites/default/files/publications/ifpridp00992.pdf](http://www.ifpri.org/sites/default/files/publications/ifpridp00992.pdf)

The purpose of this UNESCO publication is to share examples of ‘good practice’ literacy programmes that have worked in Africa. The introduction highlights the extent of the global literacy challenge, particularly for Africa, where the challenge of addressing illiteracy is inseparable from issues such as poverty, the HIV pandemic and conflicts. It advocates for a more coordinated, strengthened focus on literacy and greater investment in literacy programmes, particularly for the most marginalised groups. The paper includes a brief outline of international literacy frameworks and UNESCO’s regional conferences in support of global literacy. The body of the paper consists of case studies of effective literacy programmes grouped under five areas: family literacy and intergenerational learning; health promotion and HIV prevention; empowerment and economic self-sufficiency; languages in basic education; and Information and Communication Technologies (ICTs). Each case study includes information on: the local context; programme approach (including success factors and challenges); lessons learned; and programme coordinator contact details.

This publication is designed both for policy makers and for development practitioners implementing literacy programmes in Africa. It is a more practical resource for DCR practitioners than Oxenham et al. (2002), as it includes a number of case studies that are relevant to the DCR’s work. These include: “Potal Men” in Benin - a livestock rearing promotion project including a functional literacy component; the “People’s Action Forum” (PAF) in Zambia; “Jeunesse et Développement” in Mali – applying the Reflect approach in literacy programmes; and, “EXPRO”- which establishes centres for skills training in rural Ethiopia. These examples provide useful points for reflection for DCR practitioners. Each case study is presented within a logical and consistent structure enabling practitioners to identify where a programme shares the context, objectives and/or approach of their local programme. The challenges, success factors and lessons learned may help inform planning and implementation of similar programmes. A disadvantage of this publication is that it does not identify the criteria used to select these programmes or the evidence base for presenting them as ‘good practice’ examples.

This paper is publicly accessible at: [http://unesdoc.unesco.org/images/0015/001538/153827e.pdf](http://unesdoc.unesco.org/images/0015/001538/153827e.pdf)

Wallace’s core argument is that rural education and training (RET) is the key to more knowledgeable and productive human capital, which is essential for increased productivity, diversification and sustainability of small-scale households in rural sub-Saharan Africa. He presents a brief history of RET in sub-Saharan Africa and outlines the major constraints to improvement in the sector that have been identified through research. He argues that the main factor contributing to the ‘malaise’ in RET is the lack of a whole-systems perspective and the absence of a coherent policy framework in most countries. He argues that donor support is shifting towards more integrated systems and that clear policies and examples of innovations in the public, NGO, civil society and private sectors are emerging. Wallace proposes a 10-step framework for a ‘meaningful revitalisation’ of RET. He argues that this could largely be achieved with modest internal resources and very little external support, provided that good leadership and management are in place.

This article is less relevant to the research question than most other resources reviewed for this annotated bibliography. It is mainly based on a study done by the author and a colleague as part of a wider review for FAO and UNESCO published in 2003. This means that the content is less current than the publication date indicates. Moreover, the intended audience appears to be primarily policy makers. However, it has some value as a contextual piece. It is a well-written article that tells a logical story as it leads the reader through the history of RET in sub-Saharan Africa to current challenges facing the sector, emerging trends and finally to a proposed framework for revitalising the sector. It is relevant for development practitioners wanting to understand high level directions for the sector and could help inform NGOs’ strategic planning. The content on history, challenges and emerging trends is well-supported by scholarly evidence. Wallace’s proposed framework for RET appears logical but would be more persuasive if it was accompanied by more detail on how he decided on the particular elements. His claim that implementation of the framework is achievable “with modest internal resources and very little external support” is not backed up by supporting evidence.

Butler and Mazur assert that livelihood diversification is critical to food security, improved incomes and human development in African rural communities. They emphasise the vital role of livelihood diversification in rural areas of developing countries and discuss the significance of the ‘sustainable livelihoods’ concept as a way of understanding development pathways in Africa. The authors carry out an in-depth exploration of the principles and processes necessary to apply the livelihoods framework to support people to attain sustainable livelihoods. The application of these principles and processes are considered in light of their experience in a collaborative initiative in Uganda between the Iowa State University’s Center for Sustainable Rural Livelihoods, a Ugandan NGO and a local university. This approach is engaging farmers and rural leaders in community-based learning and capability strengthening. The authors reflect on the complexities involved in this collaborative and the challenges involved in trying to achieve the balanced partnerships needed for successful community-based programmes.

This article mainly focuses on concepts, principles and processes to promote sustainable livelihoods in rural African communities. It is not a central source for the DCR adult literacy research group’s purpose as it does not directly address the role of literacy in improving livelihoods. However, the authors’ detailed exploration of the sustainable livelihoods concept is useful as it echoes elements in the planned approach for the DCR action research initiative. For example, the sustainable livelihoods approach includes identifying and using individual and local community strengths to develop innovative approaches for addressing locally defined development issues. There is also a useful short section on participatory action research. It is a dense article to read and its use of multiple terms relating to sustainable livelihoods such as ‘concept’, ‘framework’, ‘approach’ and ‘processes’ is confusing in the absence of a glossary. The article would have benefited from a more rigorous edit, the addition of sub-headings and a diagrammatic representation of the Sustainable Livelihoods Framework. Statements are supported by scholarly references and the final reference list is extensive though many of these sources are now quite dated.

Rogers argues that positive outcomes of traditional adult literacy programmes are restricted by limited motivation of adults to participate and failure to support transfer of skills learnt to daily lives. He outlines an alternative approach – the ‘real literacies approach’ – and discusses how this approach can address these issues through its emphasis on helping people develop skills to carry out real literacy tasks in their daily lives. He contends that the approach’s emphasis on using contextualised literacy activities and material drawn from everyday life is more effective because adult learning occurs when learning takes place to meet immediate needs arising from immediate situations. The paper includes examples of how the real literacies approach is spreading. It discusses issues associated with this approach, for example how it relates to existing traditional approaches to learning literacy, and responds to these. Rogers concludes that a significant future challenge is how to expand diverse local real literacies programmes to a national programme with common measures of achievement that national governments and international development agencies will support.

This paper is cited 50 times in other scholarly articles. Despite its age, it is still used as a key reference in tertiary literacy and development courses. Rogers presents a credible, well-reasoned argument about the importance of incorporating real literacy tasks in literacy programmes and how the emerging (at the time of writing) ‘real literacies’ approach supports positive literacy outcomes. This message is intuitively common sense and is directly relevant to the DCR’s adult literacy research objectives. It suggests that, in order for numeracy to contribute to better livelihoods, the content of the literacy programme should be derived from real literacy tasks farmers bring from their daily lives. Rogers’ paper is well balanced. It does not advocate for ‘real literacies’ as an exclusive approach but shows how it can be gradually introduced as part of traditional programmes. It also includes comprehensive discussion of risks alongside benefits. Rogers’ arguments are well supported by scholarly references.

This article advocates for integrating Amartya Sen’s Capability Approach with Action Learning processes, as a means of opening spaces for critical reflection on how development programmes support people’s freedom. The authors argue that Action Learning as an evaluation method is, among other things, an exercise of power and that implementing agencies can favour objectives that relate to their own ideological positions. They suggest that Sen’s approach helps us to examine the role of development donors and practitioners as ‘guardians of the public good’ by directing our attention towards the need for open debate and informed scrutiny. This has implications for programme learning and also for an agency’s ability to challenge the ideological basis of the ‘development’ project. The authors show how this approach is applied in a regional AIDS initiative with home-based carers in Zambia and South Africa. They report that community organisations consistently find this approach valuable and they highlight its potential to adapt and work with other approaches, such as the human rights approach.

This article is written by development practitioners for other practitioners involved in planning, monitoring and evaluating development programmes. It is a well-crafted, persuasive article that incorporates a good balance of: theory justifying the approach; application of the approach in a ‘real world’ development context; and discussion of its perceived benefits. Though it does not address how adult numeracy can support improved livelihoods, it is relevant to DCR’s adult literacy research because it offers new information on an Action Learning approach and suggests how this methodology can support diverse voices to be heard and mutual accountability for the process and outcomes. It suggests that there is an opportunity for approaches such as REFLECT to be enhanced by elements of this approach. This article is a ‘think piece’ with a strong advocacy flavour and describes an emerging approach that the authors acknowledge is still developing. The proposed benefits of this approach are not backed up by reference to evidence-based research.

This paper is publicly accessible at:
http://www.tandfonline.com/doi/pdf/10.1080/09614520902807987

This article follows the journey of implementing a two-year functional literacy programme for nomadic herdsmen in Osun State, Nigeria. The nomadic community identified the need they had to develop their literacy and numeracy skills to improve their livelihoods and avoid conflict. The programme was designed to specifically focus on helping the community to recognise the value of formal education as an instrument for enhancing their livelihoods, socio-economic status and communication with the wider society around them. They did not generally access formal education because their nomadic lifestyle disrupted school attendance and they were fully employed in pastoral activities. They longed to be able to interact better with neighbouring communities. The nomadic community was involved in the project design and identified that they only wanted to learn functional literacy, which could have a rapid and direct influence on their lives. The programme was effective in improving herdsmen’s communication and conflict resolution skills. It also increased their appreciation of the benefit of schooling. The author discusses the challenges of implementing formal education programmes in a traditional society where routines are structured around strict daily timetables for animal rearing.

This paper is relevant to the DCR adult literacy theme as it addresses delivery of a literacy programme, which included a numerical literacy component, in rural Africa. (The programme was not however exclusively for adult learners). The paper outlines the journey of working with a rural community in a clear and explicit way and offers some useful material to inform future similar programmes. Dominant themes in the text include the absolute importance of making learning relevant to participants and of taking account of the occupationally driven lifestyle of nomadic learners. The researchers adopted a responsive approach that took account of the varied and distinctive needs of the herdsman and their families. Participants’ expectations and needs were valued and sessions were designed around what they identified as being important. The findings should however be treated with some caution as it appears that this research did not include a rigorous evaluation of the programme’s impact and there is limited evidence presented to support the author’s conclusions. Not all recommendations appear to be practical, for example, the recommendation that schools be built for herdsmen wherever they happen to be based.

During the last 10 years there has been rising global interest in financial literacy and measures to improve it. The notion of financial literacy has shifted to a broader concept of financial capability. A financially capable person is defined as someone who “has the knowledge, skills and confidence to be aware of financial opportunities, to know where to go for help, to make informed choices, and to take effective action to improve his or her financial well-being” (Kempson (2008), cited in Holzmann, 2010:4). This paper describes a World Bank-led work programme aimed at supporting the development of effective financial literacy and education strategies and programmes in low and middle income countries. One objective is to provide a free operational instrument for implementing national financial capability surveys that deliver results that are comparable across time and space. A second objective is to develop an evaluation framework, toolkit and guidelines for assessing the operational impact of financial education programmes and related interventions. Holzmann discusses relevant characteristics of low income countries (LICs) that impact on financial literacy programmes. He also identifies key financial literacy objectives for LICs, such as facilitating and increasing access to financial services and reducing over-indebtedness.

While this paper is not relevant in a practical sense to the DCR adult literacy research question, it provides a broad overview of financial literacy in the wider global context. It helps the reader understand the importance of numerical literacy to livelihoods and how this is being increasingly recognised as an important issue to address by influential organisations like the World Bank. “The level of understanding of financial issues by individuals is too low, with negative consequences for individuals (such as under-saving and not being informed about product choices) and the economy” (Holzmann, 2010:2). This rising interest in financial literacy in the developing world is related to concerns about: the perceived low level of financial capabilities; the low level of financial access and use; and the recognition that finance is a critical element for innovation and economic growth. The DCR adult literacy research group’s decision to focus on improving numerical literacy is consistent with the author’s view that financial capability is critical for improving individual and country-level outcomes. The group may want to consider how they take account of strengthening individuals’ financial literacy in the research programme. Overall, this paper is an interesting read as it shows where one of the major development players stands on the financial literacy issue.

This paper is publicly accessible at: http://siteresources.worldbank.org/SOCIALPROTECTION/Resources/SP-Discussion-papers/Social-Protection-General-DP/1007.pdf

This article examines the effectiveness of an adult literacy programme carried out by Ouelessebougou-Utah Alliance (OUA) - an NGO in the rural province of Koulikoro, Mali. OUA seek to promote long-term development within the region. Their literacy programme incorporates four essential elements: teaching fundamental skills; critical thinking; cultural expression; and learning through action. The researchers used qualitative methods to study how community members, particularly women, perceived literacy and experienced the process and effects of literacy training. They found that the OUA literacy intervention had minimal impact on individuals’ functional literacy and social change within the rural communities. For women, acquisition of literacy skills was not associated with concrete alterations in their economic and social conditions. The article includes an in-depth discussion of the main failings of the programme in the hope that other NGOs learn from this experience and avoid the same mistakes. “Indicators that communities are ready to engage in critical literacy cannot be overlooked, but expressions of general support for literacy instruction is not sufficient foundation for successful literacy efforts” (Fuhriman, 2006:119). The authors conclude that effective adult literacy instruction must combine promoting critical thinking and social action with the acquisition of practical skills.

This article is of particular relevance to the DCR’s adult literacy research. It provides the reader with a deeper understanding of the complex nature of development programmes. The findings could be used as a point of comparison with the programmes that the DCR are planning and implementing. The article also includes useful information on factors contributing to inequitable outcomes for women. Throughout the paper there are references to the importance of literary and numeracy on livelihoods. Community members involved in the study expressed their desire to increase their literacy levels stating, for example, that “literacy means less reliance on outside organizations, they will be able to weigh the cotton they produce, accurately fill out paperwork, access credit at the local bank and keep track of rainfalls” (Male participant: 116). The authors attribute the main failures of this project to the NGO not considering the needs of the people they were serving. They emphasise that, if NGOs are to fulfil the promise of local development, they will need to ensure that target populations are included in all stages of development projects to ensure they feel ownership over the interventions that are intended to improve their livelihoods. Like Olateju (2010), the authors reinforce the importance of literacy programmes being relevant to participants’ daily activities.

This article discusses the development of appropriate and sustainable literacy and non-formal education programmes for adults in Mozambique. The authors begin by outlining a literacy research programme led by the Eduardo Mondlane University of Mozambique. They reveal the challenges associated with the design, content and implementation of such programmes. The article includes discussion of key points from a literature review on adult learning and literacy, such as Freire's emphasis on the importance of low-educated adults perceiving themselves as actors in a changing world. The literature also warns about teaching adults in a ‘schoolish’ manner. The authors stress that adults need a different learning context and that education should be influenced by the values and experiences of the beneficiaries. The remainder of the paper describes two adult literacy studies carried out in 2006. The first study explored perceptions of literacy programmes from participants’ and potential participants’ perspectives. The second study evaluated pilot non-formal education programmes offering vocational skills to literacy learners. The authors conclude that the course content of adult education programmes to improve learners’ livelihoods should balance teaching literacy and numeracy skills with components based on learners’ needs. They also argue for significant involvement of communities in course development and emphasise the importance of empowering teachers through capacity-building programmes.

This recent article is a valuable resource for the DCR adult literacy group as it combines a range of perspectives on adult literacy programmes to improve livelihoods in one paper. The paper includes: an example of a research programme outline; a literature review; case studies; an analysis of course content and implementation considerations. The main focus is on adult literacy to improve livelihoods in a broad sense, but the content is relevant for numeracy programmes. The thorough literature review condenses some current ideas about adult learning and there is an extensive reference list to guide further reading on this topic. The ‘perceptions of literacy programmes’ research provides insights into why people join or do not join adult literacy classes, and what creates barriers to participation. The responses from participants are insightful, most believing that increased literacy and numeracy skills will lead to the end of poverty and mark the beginning of a better life. It is interesting to note that “participants seem to overrate the role of education in improving their living conditions; they are under the impression becoming literate will solve all of lives struggles” (Linde, 2011:474). Overall, this article includes important evidence-based guidance on what contributes to effective adult basic education programmes to improve learners’ livelihoods. It is a really good look at the issues from a range of angles.

This paper, prepared for a presentation, was inspired by a seminar on *Education for Rural People in Sub-Saharan Africa: Livelihoods Approaches*, which took place in the United Kingdom in 2005. The seminar was organised as part of a FAO/UNESCO Education for Rural People Partnership programme. The author shows how literacy interventions can be linked to the Sustainable Rural Livelihoods Framework (SRLF) through a matrix. The matrix includes different assets which households use to create livelihoods. The SRLF provides a clear path for monitoring the impact of literacy interventions. “The linkages seen within the table show the astonishing range of ways in which literacy can improve economic livelihoods” (Cameron, 2006:2). Cameron proceeds to systematically identify the way in which literacy impacts on every cell in the SRLF. The clearest link is between literacy gains and potential productivity in current activities as well as increased access to new activities. “People who have completed literacy courses tended to be more confident and willing to take initiatives in developing their livelihoods” (Cameron, 2006:4). Literacy gains can also lead to improved financial literacy, and better access to insurance and credit facilities, enabling enhanced participation in income-enhancing activities. Improved literacy also reduces the risk of people ‘being cheated’.

This paper is a very relevant source for the DCR adult literacy research group as it provides a deeper understanding of the many ways in which literacy gains affect and improve livelihoods. The SRLF provides a comprehensive and fresh perspective for more effective targeting and evaluation of the impact of literacy interventions on livelihoods. It can be used in a range of contexts. Cameron cites a number of creditable studies to illustrate his points. He cautions, however, that his analysis does not take account of how benefits may differ depending on the type of literacy programme. Cameron also observes that knowledge on how literacy interventions improve economic livelihoods in practice is lacking. The DCR’s adult literacy research has the potential to contribute important evidence to help address this gap.

This paper is publicly accessible at:

The global financial crisis has focused renewed attention on the importance of people being well informed about their finances. “The current crisis has also highlighted vulnerabilities created by financial innovation and the increasing complexity of financial markets” (World Bank, 2009:1). Financial literacy is relevant for all consumers regardless of their wealth and income. This noting paper, by representatives of international financial and development organisations, examines the world we are living in today and identifies the dangers that under-educated consumers face from micro-finance companies, banks, and other informal lending agencies. It stresses the importance of being well-informed and financially literate to have the best chance of being successful. This is a particular issue for developing markets, such as Africa, where only about 20 percent of people have personal bank accounts and the majority of the population have no access to financial services. African communities need to be prepared and equipped to protect their livelihoods and prevent exploitation from potential foreign investors. The paper cites two examples of successful and extensive savings campaigns in Uganda and identifies ongoing challenges. It concludes with an ‘action plan’ to be carried out in conjunction with DFID and the OECD to improve financial literacy in developing countries.

The authors of this paper express genuine concern for risks to developing countries associated with lack of financial literacy. This paper, like Holzmann (2010), provides a broad contextual analysis of this issue but is a more relevant source for the DCR adult literacy research group as it includes a significant focus on the African context. It validates the urgency for improving numerical literacy in Africa so that citizens can understand basic financial principles and avoid mistreatment from those who Africa as an ‘untapped market’. The authors argue for a greater focus on financial literacy in development programmes and provide evidence to support the value of investing in such programmes. They do not attempt to address the content or practical implementation of these programmes. This paper underscores the importance of the DCR adult literacy group’s focus on increasing numeracy skills and suggests that there may be an opportunity to strengthen the programme’s content on financial literacy. The people of Africa appear to be in an extremely vulnerable situation and this article inspires action.

This paper is publicly accessible at: http://www.oecd.org/dataoecd/35/32/43245359.pdf