Routledge
Taylor & Francis Group

Journal of Multilingual and Multicultural Development

ISSN: (Print) (Online) Journal homepage: https://www.tandfonline.com/loi/rmmm20

Language and employment in Ghana: capturing the multilingual reality

Colin Reilly, Rosario Scandurra, Elvis ResCue, Kristinn Hermannsson & Angela Gayton

To cite this article: Colin Reilly, Rosario Scandurra, Elvis ResCue, Kristinn Hermannsson & Angela Gayton (2023) Language and employment in Ghana: capturing the multilingual reality, Journal of Multilingual and Multicultural Development, 44:9, 807-826, DOI: 10.1080/01434632.2023.2195853

To link to this article: https://doi.org/10.1080/01434632.2023.2195853

Published online: 25 Jun 2023.

JOURNAL OF MULTILINGUAL AND MULTICULTURAL DEVELOPMENT
2023, VOL. 44, NO. 9, 807–826
https://doi.org/10.1080/01434632.2023.2195853

Routledge
Taylor & Francis Group

Language and employment in Ghana: capturing the multilingual reality

Colin Reilly [a], Rosario Scandurra[b], Elvis ResCue [c], Kristinn Hermannsson[d] and Angela Gayton[d]

[a]University of Essex, Colchester, UK; [b]Universitat Autònoma de Barcelona & GEPS, Bellaterra, Spain; [c]Kwame Nkrumah University of Science and Technology, Kumasi, Ghana; [d]University of Glasgow, Glasgow, UK

ABSTRACT

Research on economic activity in Africa consistently ignores the importance of individuals' linguistic repertoires. We argue that an important contributing factor to the persistence of this lacuna is the lack of visibility of language in the social and economic data that is collected by governments through social surveys. We examine the specific case of language use at work in Ghana. Through this we aim to demonstrate the importance of improving understanding of the role of language in the economy and assess the potential for improving visibility of languages in the socioeconomic data sources used to inform public policy. This case is interesting as, prima facie, education policy in Ghana appears misaligned, prioritising the acquisition of English and skills formation for further study, with less focus on entry into informal employment. Eighty percent of the Ghanaian workforce is in informal employment; this is a much less English-intensive work context than the formal sector, which itself is not a monolingual environment. We suggest that current language policies within the country undervalue the potential which multilingual language skills have for employment; moreover, we emphasise that multiple languages are visible within the labour market, and suggest strategies for more effectively capturing this visibility.

ARTICLE HISTORY
Received 12 October 2022
Accepted 9 March 2023

KEYWORDS
Labour market; multilingualism; language at work; survey; Ghana

Introduction

Research on economic activity in Africa consistently ignores the importance of individuals', often multilingual, linguistic repertoires (see Djité 2008, 2021). We argue that an important contributing factor to the persistence of this lacuna is the lack of visibility of language in the social and economic data that is routinely collected by governments through social surveys, such as censuses, and household and employer surveys. We examine the specific case of language use at work in Ghana through an interdisciplinary lens, drawing on complementary sets of expertise in the fields of applied linguistics, language policy, sociology of education and labour economics. Doing so aligns with Rassool's (2013, 63) support for integrating multiple sets of disciplinary expertise to address extant issues which sit at the intersection between language and economics. Through this we aim to demonstrate the importance of improving understanding of the role of language in the economy

CONTACT Colin Reilly colin.reilly@essex.ac.uk Department of Language and Linguistics, University of Essex, Colchester CO4 3SQ, UK

and assess the potential for improving visibility of languages in the socioeconomic data sources used to inform public policy. Understanding what languages and language practices are visible and used within the labour market is important as this is a pre-requisite for informed policy on equipping individuals with the skills needed to navigate employment opportunities. This case is interesting as, prime facie, education policy in Ghana appears misaligned, prioritising English language acquisition and skills formation for further study, with less focus on entry into informal employment. The reality is that only 35% of children complete secondary school (MICS-EAGLE 2020) and children leaving education after the primary level do not have expected literacy levels in any language (Erling, Adinolfi, and Hultgren 2017). Moreover, 80% of the Ghanaian workforce is in informal employment (Osei-Boateng and Ampratwum 2011; Akuoko, Aggrey, and Amoako-Arhen 2021); this is a much less English-intensive work context than the formal sector, which itself is not a monolingual environment. Our analyses demonstrate a further complication, that educational attainment and labour market destinations (formal/informal) are strongly associated with linguistic background, and therefore language policy in education and labour markets is both a matter of efficiency and equity.

This paper reports on research findings from a Global Challenges Research Fund project which investigated language and labour market issues in Ghana. We seek to address the following questions:

(1) What languages are used at work in Ghana?
(2) How can we better investigate the visibility of languages in the workplace?

To respond, we draw on aggregate statistics through analysis of the World Bank's STEP (Skills Towards Employability and Productivity) survey of skills. We begin by discussing relevant literature on language and economic opportunities, highlighting the prevalent ideologies of English as the language of value and the literature gap regarding multilingual practices in the informal sector. We then discuss our methodological approach and present findings from the STEP survey. We then consider the limitations of current survey approaches to collecting information on the visibility of multiple languages in multilingual contexts, and conclude with recommendations for improving data collection regarding language use at work.

We suggest that current language policies in Ghana undervalue the potential which multilingual language skills have for employment; moreover, we emphasise that multiple languages are visible within the labour market, and suggest strategies for more effectively capturing this visibility.

Ghanaian context

Ghana is a complex multilingual context, with multilingualism the norm rather than exception. The country has around 73 languages (Eberhard, Simons, and Fennig 2022). Among these languages, 9 are government-sponsored languages: Akan (3 dialects: Akwapem Twi, Asante Twi, and Fante), Dagaare, Ga, Dangbe, Dagbani, Ewe, Gonja, Kasem and Nzema. This means that, since 2003, they have been used as media of instruction from primary grades 1–3 and as subjects of study from grade 4 to tertiary level (Yevudey 2017; Owu-Ewie 2006). Equally, these government-sponsored languages are used as media of translation in the Parliament of Ghana. English is the official language of the country through which all government communications and documents are presented.

In education, language of instruction policy dictates the use of government-sponsored languages as well as English at the lower grade classes 1–3. From grade 4 onwards government-sponsored languages become subjects of study, and English becomes the medium of instruction (Ministry of Education, Ghana & Ghana Education Service 2014). This policy privileges English as the main 'educational' lingua franca and excludes the majority of languages in the country. Despite policy provisions to use English as the sole medium of instruction from grade 4 onwards, there is a

disparity when it comes to practice. Studies have shown that teachers and learners concurrently use English and indigenous languages in their academic conversations within and outside the classrooms (Tefeh 2020; Quarcoo and Amuzu 2016). More generally within the country, the ex-colonial language, English, performs high and prestigious functions, followed by government-sponsored languages, and then other indigenous languages (cf. Agbozo and ResCue 2020).

Language planning and policy in education

Discussions of language and language policy issues in Africa have been consistently constructed from a monolingual perspective ignoring the lived multilingual reality of individuals, and the fluid ways in which speakers use their entire linguistic repertoires to navigate their lives (see Reilly et al. 2022; Ndhlovu and Makalela 2021). Rather than multilingualism itself being the root of poor socioeconomic development, it is instead ill-fitting language policies that do not effectively harness the multilingual resources, and fluid language practices, within low-income contexts (Djité 2008; Batibo 2014). The adoption of language policies in multilingual, low-resource contexts which do not accurately reflect the linguistic reality of the given context can inhibit individuals from being able to access key services and systems within their countries, for example in the health, education, political, and economic domains (Djité 2008; Williams 2011; Negash 2011). For an individual to have the opportunity to develop both socially and economically, they must be able to freely engage in systems within the states in which they live (Sen 1999).

Djité (1990, 96) highlights the important role which language planning and language policy creation have within multilingual countries, stating: 'the formulation of a rational language policy in a multilingual nation is in itself an economic issue and should have as high a priority as other economic issues'. Djité (2021) also notes that a key gap in sociolinguistic research in African contexts is investigating language practices and the importance of language within the labour market, particularly in the informal sector given its predominance in many African countries. The absence of efficient and effective language policy and planning in Africa is considered a major cause of abysmal economic performance and fragility where the languages used by the majority are marginalised (Djité 2020), alongside the promotion of ex-colonial languages both for national and international communication and transactions. To achieve sustainable development within the continent, multilingualism must be managed as part of any language policy and planning pursuit, where linguistic diversity can be perceived as a resource rather than a problem (Lo Bianco 2001; Djité 2020; Ògúnwálé 2012). This marginalisation is clearly reflected within education, where indigenous languages are adopted in the early years of education, usually grades 1–3, before a transition to ex-colonial languages from grade 4 onwards (e.g. Ghana), or in some instances, only ex-colonial languages are used as a medium of instruction (e.g. Malawi) (cf. Reilly, ResCue, and Chavula 2022).

Language education and development economics are considered by Bruthiaux (2000) as natural bedfellows and Grin, Sfreddo, and Vaillancourt (2010) argue that successful language-in-education policy must consider the language skills which are necessary for citizenship participation, and valuable for individuals and communities in the labour market (see Gazzola, Grin, and Wickström 2016 for a comprehensive literature review on language and economics).

Relationship between language and economy

In many African contexts, English is associated with being educated, with high socioeconomic status, and perceived as key to economic success. This is true in Ghana, where acquiring English is viewed as essential to the access to, and enhancement of, social and economic opportunities (Obeng 1997; Anderson, Ansah, and Mensa 2008; Dako and Quarcoo 2017; Bodomo, Anderson, and Dzahene-Quarshie 2009). As part of an extensive literature review, Erling, Adinolfi, and Hultgren (2017) highlight common attitudes towards the value of English. In Ghana, and the broader

African context, English is often viewed as a language with labour market value (Erling 2014; Roy 2014), that provides opportunities and potential for higher earnings (Laitin 1994; Mfum-Mensah 2005; Davis and Agbenyega 2012; Trudell 2007; Probyn 2009; Tembe and Norton 2011). Through interviewing teachers in Ghana, Erling, Adinolfi, and Hultgren (2017, 86) found that there is a common perception that 'students need English to access jobs beyond schooling'. The English language is viewed as 'a language of opportunity, social mobility and … [it is viewed] as an ingrained and unquestioned element of the educational system, wider society and the globalised economy' (Erling, Adinolfi, and Hultgren 2017, 93). These beliefs surrounding English do not extend to Ghanaian languages which are instead viewed as languages with important value as markers of identity, community, and culture (Crystal 2003; Erling, Adinolfi, and Hultgren 2017). These attitudes are linked to the perceived value of English within the global economy (Sah 2021) and the 'neoliberal promise of English – that English will bring individual and national economic benefits' (Kubota 2016, 469). The neoliberal push towards learning English to participate in the global economy does not reflect the reality of language use in the workplace, nor inequitable access to labour market opportunities (Sah 2021).

The link between linguistic diversity and economic development has been debated. The 'active promotion of a single vehicular language' was often believed to accelerate a country's economic development and ease economic exchange (Coulmas 1992, 41). Multilingualism and linguistic diversity have been considered to be factors related to low economic development, and which stall economic growth (Pool 1972; Coulmas 1992). The perceived link between multilingualism and low levels of economic growth resulted in the belief that socioeconomic development could be achieved through the adoption of monolingual language policies, which would spur economic growth, particularly when the language used is English (Appleby 2002; Roberts 2007). However, Arcand and Grin (2013) found that multilingualism, the use of local languages, and embracing linguistic diversity, can stimulate economic growth.

Linguistic issues are consistently overlooked in development initiatives and international frameworks seeking to promote sustainable development and socioeconomic growth. Additionally, language planning efforts in multilingual contexts have been criticised for insufficiently incorporating economic considerations (Bruthiaux 2000; Kamwangamalu 2016). Language, and language skills, can be viewed as economic entities (Wright 2002) each with social and economic capital with their own values, costs, and benefits, which can make particular languages more or less attractive for individuals to use for their own economic mobility (Bourdieu 1991; Strauss 1996; Pomerantz 2002; Grin 2003; Heller 2009; Zhang and Grenier 2013). Taking this into consideration and viewing languages as market-oriented commodities offering economic value to speakers in particular contexts could present a new, more pragmatic perspective for language planning (Pennycook 2008; Phaahla 2015).

The concept of linguistic citizenship was proposed by Stroud as a way of departing from the 'linguistic human rights' model of understanding how we relate to language(s); in comparison, Stroud suggested that linguistic citizenship is a more inclusive concept, which offers individuals greater 'transformative agency' (Stroud and Kerfoot 2021, 32) to delineate what specifically is meant by a language (i.e. how a language is defined, and why), to pose a challenge to fixed ideas about the relationships between language and identity (Stroud 2001, 353), where identity is understood as a dynamic construct. Importantly for our work, Stroud (Stroud 2001, 348) contends that linguistic citizenship is fitting for linguistically heterogeneous contexts, as it 'criticises the legitimacy of main-stream, majority speaking, official-language society to delimit and characterise language practices solely in terms of formal and public spheres' (Stroud 2001, 350). We are then concerned with what linguistic citizenship means for participation in and access to labour market opportunities of differential earning power and status. Knowledge of the linguistic labour market requirements would then allow language planners to cultivate language policies which could adequately equip individuals with the appropriate skills in particular languages for full participation in society. Highlighting the economic aspect of language and language policies could

lead to linguistic issues being taken more seriously by international and national policy makers (Kamwangamalu 2016).

The relationship between language and the economy is an under-researched area, and our understanding of how multilingual repertoires may be operationalised within the labour market in many African countries is limited. The paper now turns to a discussion of current data which is available regarding language and the labour market, followed by a discussion of how we can best collect information on what languages are used within the labour market in multilingual contexts, and how these languages are used and made visible.

STEP survey of adult skills in low- and middle-income countries

The STEP survey was chosen for analysis as a rare example of a large-sample dataset for a low/middle income country that combines information on labour market participation and earnings with socioeconomic background information, general skills, language skills and crucially for our purposes, language use. After our project concluded, the Ghana Statistical service released the 2021 Population and Housing Census. A far superior survey in terms of sample size and representativeness, its inventory of language skills is however rudimentary, asking respondents a binary question as to whether they can read and write across a list of 23 languages. The census collects data on labour market participation but not about language use at work, nor earnings. It will be a useful source for mapping the geographical coverage of language abilities and how this intersects with socioeconomic outcomes, such as education, family structure, marital status, dwelling type, work, and household assets. However, the census overlooks language use, whether at work or home.

The STEP Skills Measurement Program is the first program which seeks to assess adult skills in low- and middle-income countries. Commissioned by the World Bank, it was run in 17 countries. It consists of three modules: a direct assessment of reading proficiency similar to the Programme for International Assessment of Adult Competence (PIAAC), commissioned by the OECD; self-reported information on personality traits; and job-relevant skills. Fieldwork for the STEP survey in Ghana was conducted between September 2011 and December 2013. The units of analysis are both individuals and households. A household roster was undertaken at the start of the survey and individual respondents were randomly selected among all household members aged between 15 and 64. The universe is the active adult non-institutionalised population, living in urban areas in private dwellings (military barracks excluded). The sample comprises 2,987 respondents. Consistent with the population's age structure, younger cohorts were larger than older cohorts, with over two thirds of respondents under the age of 39. The sample's gender balance was uneven with 58% female respondents and 42% males. Detailed data documentation is provided by the World Bank's Microdata Library.[1]

We aim to highlight what languages are visible within the workplace in Ghana. Our analysis of the STEP data focuses specifically on questions related to language use at work, which straddles both formal and informal sectors and different forms of work, such as employees and the self-employed. This is foregrounded with an analysis of how the linguistic group an individual is born into conditions expected outcomes in terms of education, language skills and work – and ultimately a range of observed life outcomes. We provide descriptive statistics which highlight the intersection of mother tongue and observed life outcomes, as well as range of languages used in the workplace and the different contexts in which they are used. It is important to note that, while we believe analysis of the STEP data to be valuable in elucidating such issues, we do not necessarily theoretically align ourselves with the somewhat limiting way the tool operationalises certain concepts such as the notion of 'mother tongue' (see section 4 for reflection on this complex matter). Whilst some of the language categories reported in STEP only contain a modest number of observations, it was deemed to be important to display findings for different language group categories at as disaggregated a level as possible. Point estimates are presented

Table 1. Observed feature of respondents categorised by self-identified mother tongue.

What is your mother tongue?	*n*	Age in years	Female (%)	At least 1 parent completed secondary schooling- (%)	Years of education (average)
Akan	1700	33.3	59%	66%	9.1
Ga-Adangme	266	34.6	53%	63%	9.5
Ewe	335	33.4	57%	62%	9.5
Guan	76	32.7	55%	53%	8.4
Mole-Dagbani	271	32.0	53%	18%	5.9
Grussi	67	30.9	51%	27%	7.4
Mande	20	31.1	55%	10%	3.9
Gurma	54	29.9	54%	28%	4.9
Other Ghanaian	39	30.5	54%	31%	4.9
Other West African	53	31.8	60%	32%	5.1
Other	91	32.7	60%	29%	6.2
Total/average	2,972	33.1	57%	56%	8.5

with confidence intervals to illustrate how scarcity of observations affects estimates' precision for some categories.

Education and labour market outcomes across linguistic groups

In Table 1, we summarise the number of respondents by each mother tongue category and their key observed features. The second column shows that Akan is the language most respondents (57%) consider their mother tongue. Approximately 10% of respondents state each of Ga-Adangbe, Ewe and Mole-Dagbani as their mother tongue. Fewer respondents state other languages as their mother tongue, which inevitably affects the statistical accuracy of estimates for these groups. If we accept the available data at face value and momentarily ignore sampling variation, respondents in each mother tongue category show similarity in their demographic characteristics, i.e. age and sex, suggesting sampling for each category is random. However, columns 4 and 5 suggest respondents vary systemically between mother tongue categories in terms of their background and outcomes. Whilst on average more than half of respondents have at least one parent that completed secondary schooling, this share is much lower for some of the less common mother tongue categories, in particular Gurma (28%), Grussi (27%), Mole-Dagbani (18%) and Mande (10%). Large differences in terms of education are similarly observed for the present generation of respondents. The average respondent has completed 8.5 years of education, whilst those stating Mande as their mother tongue have only completed 3.9 years; and for Gurma, 4.9 years.

To explore more rigorously the pattern of educational attainment across the broad linguistic groups defined by the mother tongue question in STEP, we estimate a simple linear regression model where *Ei* is the education in years for individual *i*:

$$Ei = \alpha + \beta jLi + \gamma Ai + \delta Si + \theta EPi + \mu kDi + \varepsilon \quad (1)$$

We estimate four progressively more 'controlled' specifications of this model, reported in Table 2. In the first, the only explanatory factor included is the term βjLi, where Li represents the linguistic group reported by individual I and βj designates the average effect upon attainment associated with each linguistic group. Subsequently we add terms for age in years γAi and sex δSi. The purpose of these terms is to correct compositional differences regarding age and sex between the linguistic groups in our sample, to approximate a like-for-like comparison. Finally, we add two terms controlling for parental education and district. Parental education is a binary variable, which is 1 if at least one parent completed secondary education (θEP) and μkDi is vector corresponding to the district k where respondent i lives. Coefficient plots for models 2 and 4 (with parental education and district controls) are provided in Figure 1. This compares years of education between Akan speakers and all other linguistic groups. If below 0, members of the linguistic group on average report fewer years of education than Akan speakers. Confidence intervals are calculated to show

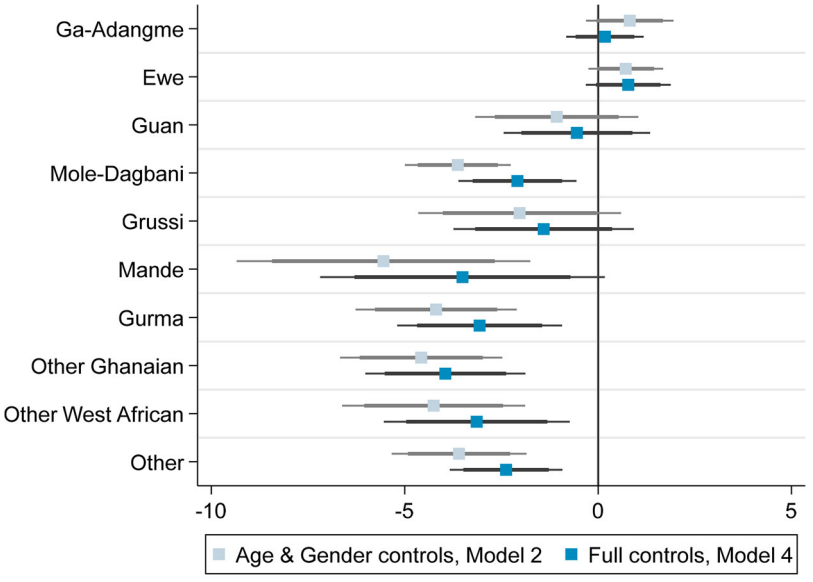

Figure 1. Effect of linguistic group on educational attainment. Figure displays average difference in years of educational attainment between those that identify Akan as their mother tongue and those that belong to other linguistic groups. Dots and lines show point estimate of coefficients and their confidence intervals for Model 2 and Model 4, respectively. The thinner bar shows 99 confidence interval and the thicker one 95% confidence interval. The vertical line at 0 represent no effect size.

where the observed point estimate could lie with 95% probability given sampling variation. When the confidence interval does not cross 0, the estimate is statistically significantly different from that observed for Akan speakers.

Figure 1 shows that the confidence intervals on estimates of linguistic group effects are very large. Nonetheless, estimates are often statistically significant as differences are also large. For our preferred model (Model 2) we see positive effects for Ga-Adangme and Ewe that are weakly significant

Table 2. Cross sectional models of educational attainment in years by linguistic group[a] (defined by self-identified mother tongue).

	(1)	(2)	(3)	(4)
Ga-Adangme	0.950**	0.817*	0.878**	−0.055
Ewe	0.776**	0.714*	0.817**	0.457
Guan	−0.968	−1.07	−0.636	−0.597
Mole-Dagbani	−3.553***	−3.628***	−2.112***	−2.530***
Grussi	−1.865*	−2.028**	−0.737	−1.456
Mande	−5.456***	−5.550***	−3.742***	−4.338***
Gurma	−4.252***	−4.188***	−2.886***	−3.433***
Other Ghanaian	−4.186***	−4.574***	−3.534***	−4.369***
Other West African	−4.247***	−4.252***	−3.008***	−2.892***
Other	−3.789***	−3.595***	−2.358***	−2.247***
Age		−0.044***	−0.008	−0.016
Female		−2.161***	−2.090***	−1.988***
Parent with secondary schooling			3.087***	2.735***
District controls				√
Intercept	9.004***	11.730***	8.488***	8.721***
N	2972	2972	2972	2972
R^2	0.099	0.151	0.218	0.292

[a]The reference category is made up of individuals that identify as Akan mother tongue speakers. The coefficients for linguistic groups represent average deviation in educational attainment express in years from the average of the Akan mother tongue group.

at 90% confidence level. However, these are insignificant in Model 4, suggesting they are driven by location effects rather than language as such. Negative effects for Guan and Grussi are statistically insignificant. Particularly in the case of Grussi, this is influenced by the small number of observations and hence large confidence intervals. Negative and significant effects are observed for Mole-Dagbani, Mande, Gurma and other linguistic groups. Based on Model 2, these effects are large, ranging from approximately 3.5–5.5 fewer years of educational attainment. Controlling for education of previous generations and geography moderates these effects (Model 4), but they are nonetheless substantial, ranging between 2 and 4 fewer years of education. Given the strong effect that linguistic background (as proxied by stated mother tongue) has on observed education, it is likely that labour market outcomes also vary substantially across linguistic groups.

Table 3 summarises observed labour market outcomes by linguistic groups. Some groups are represented by few respondents, which reduces the precision of any comparison given large confidence intervals. On average the respondents' employment rate is 73%. There is variation across groups, with the highest employment rate observed for the Gurma mother tongue group and the lowest for those who state other Ghanaian languages as their mother tongue. More profound differences are observed for occupational destinations in the formal sector. On average 16% of respondents work in the informal sector, while this is 50% higher for the Ewe mother tongue group at 24%, and for those stating other West African languages as their mother tongue only 3% gain employment in the formal sector, one fifth of the average for all respondents. There is minor variation in the number of hours worked per week across linguistic groups: the average is 35.7 h; the lowest number observed is for the Other West African languages group at 34.6%; and the highest 41.1 h, observed for the other group. Substantial differences are observed for average hourly earnings (in USD in column 6). Average hourly earnings stand at 3.3USD, while the highest are more than twice that for the Grussi group (7.5USD), and the lowest observed is for the Mande group at 1.3USD, or just under two fifths of the average. More starkly, on average the hourly wages of a member of the Grussi group is nearly six times that of the Mande group.

To examine more rigorously earnings differentials across the broad linguistic groups defined by the mother tongue question in STEP, we estimate a wage equation[2] where, $\ln Wi$ is the natural logarithm of hourly earnings in USD for individual i:

$$\ln Wi = \alpha + \beta jLi + \gamma 1Xi + \gamma 2X2i + \delta jSj + \theta Ei + \mu Ii + \pi kDi + \varepsilon \quad (2)$$

This is regressed on a vector of binary variables for each linguistic group (with Akan excluded as a reference category) βjLi and following convention a quadric term for age $\gamma 1Xi + \gamma 2X2i$. This reflects the stylised observation that over the working life, age is associated with rising wages until it peaks and starts declining again. We also include terms for being female (δjSj), years of education (θEi), working in the informal sector (μIi) and a vector of controls for districts (Di).abl Estimates are reported in Table 4.

Table 3. Labour market outcomes by linguistic group (as defined by stated mother tongue).

What is your mother tongue?	*n*	Employed (%)	Share of employed working in the formal sector (%)	Average number of hours worked in a week	Average hourly earnings (USD)
Akan	1700	72%	15%	34.7	3.3
Ga-Adangme	266	73%	23%	38.5	4.5
Ewe	335	75%	24%	36.2	2.8
Guan	76	79%	15%	35.6	3.8
Mole-Dagbani	271	73%	15%	35.6	2.4
Grussi	67	72%	13%	37.6	7.5
Mande	20	75%	20%	39.5	1.3
Gurma	54	82%	9%	38.1	1.9
Other Ghanaian	39	69%	15%	38.4	1.7
Other West African	53	76%	3%	34.6	5.5
Other	91	76%	7%	41.1	2.2
Total/average	2,972	73%	16%	35.7	3.3

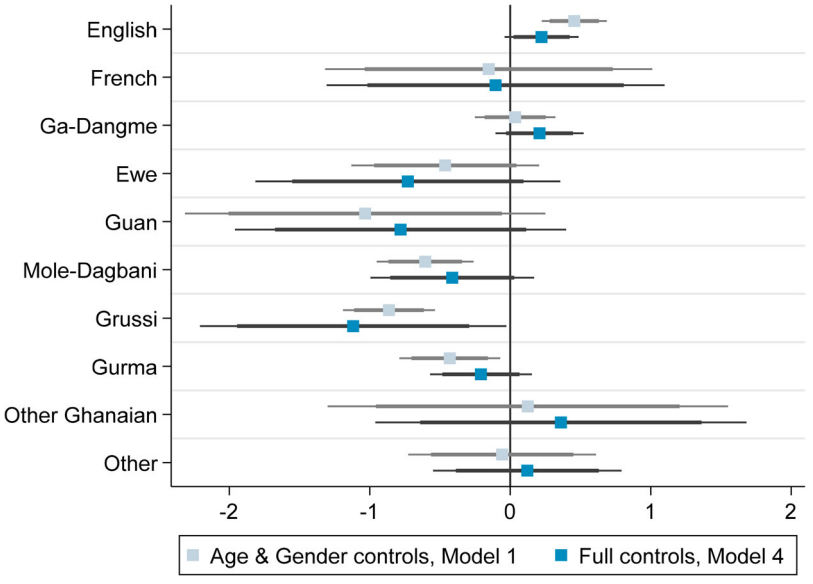

Figure 2. Coefficient plots for mother tongue effects on earnings, compared to the reference group Akan. Figure displays average difference in USD dollar hourly earnings between those that identify Akan as their mother tongue and those that belong to other linguistic groups. Dots and lines show point estimate of coefficients and their confidence intervals for Model 2 and Model 4. The thinner bar shows 99 confidence interval and the thicker one 95% confidence interval. The vertical line at 0 represent no effect size.

Figure 2 plots the mother tongue group coefficients for Model 1 and Model 4. Whilst a clear pattern emerged for years of education, the association between linguistic origin and earnings is much less clear-cut. Compared to the largest Akan mother tongue group, other groups experience both advantages and disadvantages in terms of earnings. Model specification 1 shows an earnings gap for Mole-Dagbani and Other language speakers. However, none of the language groups show a statistically significant difference from 0 in the full model. Moreover, these estimates are not precise; they come with large confidence intervals. In some cases, this is driven by few observations but

Table 4. Earnings by linguistic group (stated mother tongue).

	(1)	(2)	(3)	(4)
Ga-Adangme	0.138	0.106	0.091	0.208
Ewe	−0.225	−0.260*	−0.288**	−0.227
Guan	−0.362	−0.322	−0.328	−0.012
Mole-Dagbani	−0.512***	−0.357***	−0.389***	−0.223
Grussi	−0.359	−0.261	−0.288	0.016
Mande	−0.454	−0.228	−0.405	−0.354
Gurma	−0.401**	−0.214	−0.263	−0.171
Other Ghanaian	−0.518	−0.313	−0.364	−0.238
Other West African	0.302	0.481	0.49	0.618**
Other	−0.357**	−0.161	−0.177	0.075
Age	0.071***	0.068***	0.062***	0.054***
Age^2	−0.001***	−0.001***	−0.001***	−0.001***
Female	−0.495***	−0.379***	−0.332***	−0.372***
Years of education		0.042***	0.028***	0.031***
Informal sector			−0.459***	−0.394***
District controls				√
Intercept	−0.640*	−1.080**	−0.461	−0.446
N	1962	1962	1962	1962
R^2	0.068	0.095	0.109	0.213

Dependent variable natural logarithm of earnings in USD.

there is also the issue of high variability in earnings, and linguistic origin is only one of the influences. The earnings models are a weaker fit than the attainment model as gauged by the share of variance explained (R^2). Could language play a further role in explaining labour market outcomes?

Language use in the labour market

Table 5 provides responses to questions regarding which languages individuals use at work. Respondents are able to select up to three languages that are regularly used in the workplace (we discuss limitations of this approach below). By far the most used primary language at work is Akan (57%), followed by English (21.9%); Mole Dagbani and Ewe are about 5% each, and much fewer respondents report first use of other languages. About half of respondents report using a second language regularly at work, and just over 11% report using a third language regularly. Table 6 reports on the intersection of the use of the primary language regularly used at work and the secondary language. The column percentages denote the primary language regularly used at work, and row percentages denote the share of respondents that report using a secondary language. By far the most common combination of languages is that of Akan and English; Ga-Dangme and Ewe.

Figure 3 illustrates that the most spoken language in formal work is English (71.5%), followed by Akan (22%). This is reversed in the informal sector (Figure 2), where Akan is the most commonly spoken language (64%), with English at 12%.

Figure 4 highlights the language practices at work according to gender. For both males and females, multiple languages are reported, with Akan being the most common, followed by English. 32% of men regularly use English in the workplace which is over double the percentage of women (14%).

Whilst the frequencies of languages used at work give an indication of their importance in this domain, this is an imperfect indicator of their economic importance, as groups vary according to hours worked, and their earnings. To provide a more explicit proxy of the economic importance of different languages, we weight language use at work by hours and earnings in Table 7. Column C indicates that 9 languages are used for over 40 h of work per week, and Column E shows the average hourly wage earned by each language. English is associated with the highest earnings at $5, with Akan following on $3: i.e. using English at work confers prima facie a 67% wage premium over using Akan.[3] Calculating the total income attributed to primary language use (column F), we see that within the Ghanaian economy Akan accounts for 51% of labour income, followed by English (33%), GaDangme (4.3%), Mole-Dagbani (3.3%), and other languages accounting for a smaller share of labour income. This analysis provides evidence to challenge perceptions of English as the sole, or most, valuable language for engaging with the

Table 5. Languages regularly spoken for work.

	1st language		2nd language		3rd language	
Language(s) regularly spoken for work	n	%	n	%	n	%
No response provided	15	0.7%	1,094	50.0%	1940	88.7%
English	479	21.9%	354	16.2%	60	2.7%
French	8	0.4%	27	1.2%	4	0.2%
Akan	1,248	57.0%	419	19.2%	56	2.6%
Ga-Dangme	105	4.8%	119	5.4%	64	2.9%
Ewe	109	5.0%	61	2.8%	34	1.6%
Guan	19	0.9%	12	0.6%	2	0.1%
Mole-Dagbani	114	5.2%	34	1.6%	3	0.1%
Grussi	24	1.1%	9	0.4%	3	0.1%
Gurma	16	0.7%	4	0.2%	2	0.1%
Other Ghanaian	15	0.7%	16	0.7%	4	0.2%
Other	36	1.7%	39	1.8%	16	0.7%
Total	**2188**	**100%**	**2,188**	**100%**	**2188**	**100%**

Table 6. Intersection of first and second language spoken at work.

Language(s) regularly spoken for this work – 2	Language(s) regularly spoken for this work – 1												
	No response provided	English	French	Akan	Ga-Dangme	Ewe	Guan	Mole-Dagbani	Grussi	Gurma	Other Ghanaian	Other	Total
No response provided	0.7%	5.6%	0.1%	35.6%	0.7%	2.2%	0.5%	3.4%	0.4%	0.3%	0.5%	0.0%	**50%**
English	0.0%	0.0%	0.1%	**13.0%**	0.4%	1.4%	0.1%	0.6%	0.3%	0.1%	0.0%	0.2%	**16%**
French	0.0%	0.6%	0.0%	0.4%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**1%**
Akan	0.0%	**11.5%**	0.0%	0.0%	**3.5%**	1.1%	0.2%	0.9%	0.4%	0.2%	0.2%	1.3%	**19%**
Ga-Dangme	0.0%	1.5%	0.0%	**3.9%**	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**5%**
Ewe	0.0%	1.2%	0.1%	1.5%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**3%**
Guan	0.0%	0.1%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	**1%**
Mole-Dagbani	0.0%	1.1%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.0%	0.1%	**2%**
Grussi	0.0%	0.2%	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	**0%**
Gurma	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%	0.0%	**0%**
Other Ghanaian	0.0%	0.0%	0.0%	0.5%	0.0%	0.1%	0.0%	0.1%	0.0%	0.1%	0.0%	0.1%	**1%**
Other	0.0%	0.1%	0.1%	1.3%	0.0%	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	**2%**
Total	**1%**	**22%**	**0%**	**57%**	**5%**	**5%**	**1%**	**5%**	**1%**	**1%**	**1%**	**2%**	**100%**

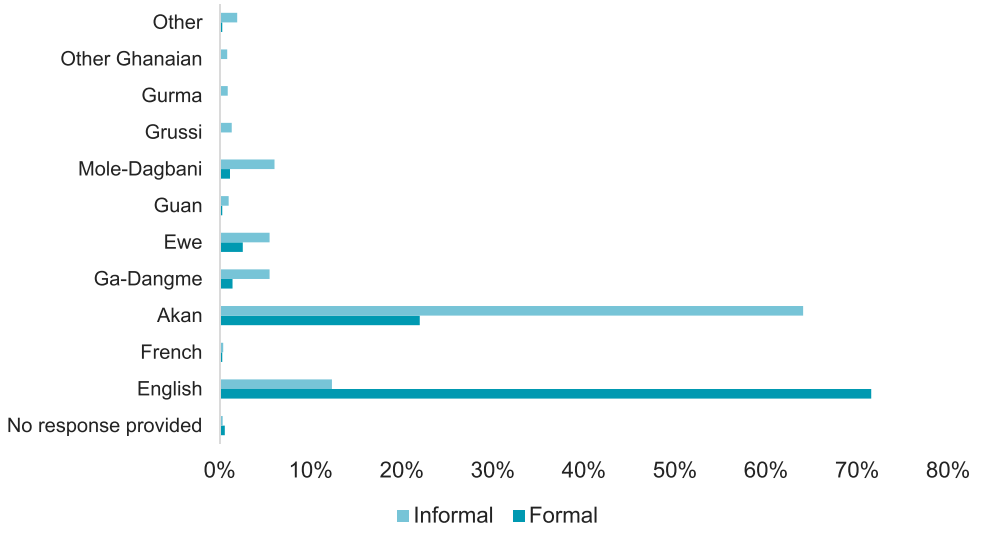

Figure 3. Language(s) regularly spoken in formal and informal work.

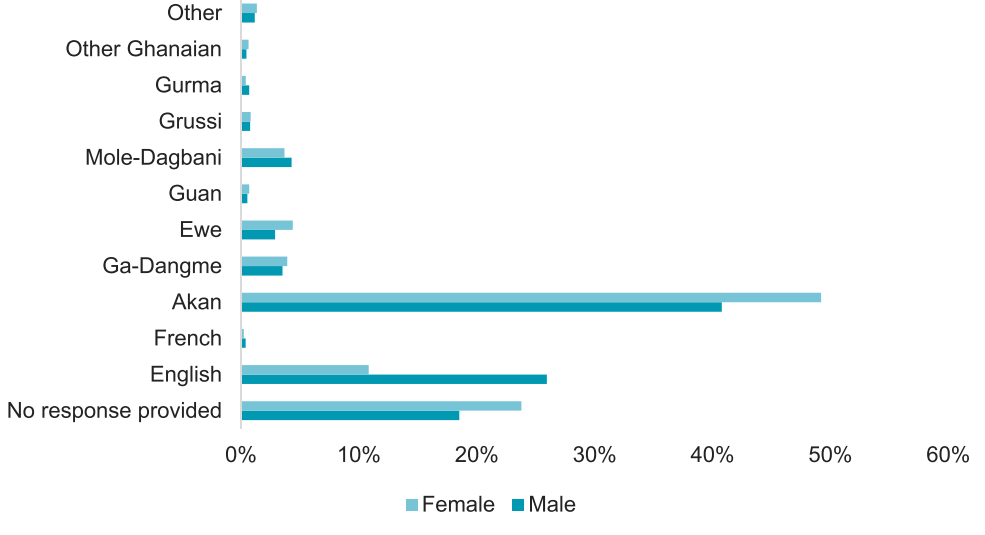

Figure 4. Language(s) regularly spoken by gender.

labour market, as it highlights the value of Ghanaian languages. This analysis is, however, based on the STEP survey, and is therefore from a monolingual perspective which, as we discuss below, is not necessarily appropriate for investigating the visibility and value of language within a multilingual context.

The English language wage premium

Column E of Table 7 reveals a substantial earnings premium for those using English at work. English-users earn an average of $5 per hour, whereas the average worker (including English-users) earns $3.3 and non-English users $2.8: a prima facie wage premium of 80%. With apparent

Table 7. Language use at worked weighted by hours worked in each language and the average wages associated with working in that language.

Language(s) regularly spoken at work	(A) number of respondents	(B) estimated population	(C) Average weekly hours worked	(D) Estimated total weekly hours worked (C × B)	(E) Average hourly earnings (USD)	(F) Total income from work USD millions (D × E/ 1,000,000)	(G) Share of total income from work (%)
No response provided	9	19,343	41.6	803,838	3.7	3.0	0.5%
English	479	878,799	48.8	42,910,012	5.0	216.6	33.4%
French	8	16,044	57.8	926,523	2.2	2.0	0.3%
Akan	1,248	2,273,798	48.9	111,216,008	3.0	332.4	51.3%
Ga-Dangme	105	195,646	53.8	10,533,184	2.7	28.0	4.3%
Ewe	109	182,195	46.4	8,447,854	2.0	17.0	2.6%
Guan	19	35,926	39.4	1,414,330	0.8	1.1	0.2%
Mole-Dagbani	114	244,640	46.6	11,397,293	1.9	21.1	3.3%
Grussi	24	58,395	48.7	2,844,298	0.7	2.0	0.3%
Gurma	16	47,385	58.4	2,769,077	1.2	3.3	0.5%
Other Ghanaian	15	51,302	45.3	2,325,677	5.3	12.3	1.9%
Other	36	59,354	49.3	2,928,957	3.2	9.4	1.4%
Total/ average	2182	4,062,828	48.9	198,517,051	3.3	648	100%
Non-English users	1703	3,184,029	48.9	155,698,998	2.8	432	66.6%

labour market benefits of this magnitude, it is unsurprising that English is held in high esteem. Note, however, that the wage premium we observe is indicative of the earnings power of English language speakers, which is not automatically indicative of the earnings power of the English language as such. The two should not be conflated, as those using English for work differ from other participants in the labour market both in terms of their language skills and other attributes that greatly affect earnings. For instance, in the STEP data, those using English for work have on average completed 13.3 years of education, whereas the average for all respondents is 8.5 years – an educational gap of 56% in favour of English-users (as was reported in Table 1).

To unpack this issue, we estimate a cross-sectional wage equation (equation 2), this time focussing on the earnings premium of those using English at work and how its estimate is affected by the extent to which other observable features that affect earnings are controlled for. The first model reported in Table 8 shows the raw effect of English on earnings, only including age to control for potential experience. This model implies an approximately 66% earnings premium compared to those that do not state English as the most-used language at work. This premium is reduced by 10 log points once we control for sex in model 2, and sharply reduced once we introduce years of education in model 3, which implies around 35% earnings premium can be expected from using English at work for a given level of education. Finally, in our fourth model we also control for being in informal sector. This further reduces the wage premium associated with English,

Table 8. Estimates for earnings premium of those that use English at work.

	(1)	(2)	(3)	(4)
English at work	0.656***	0.555***	0.355***	0.260**
Age	0.074***	0.080***	0.075***	0.070***
Age^2	−0.001***	−0.001***	−0.001***	−0.001***
Female		−0.383***	−0.330***	−0.316***
Years of education			0.032***	0.021**
Informal work				−0.302**
Intercept	−1.266***	−1.119***	−1.299***	−0.973**
N	1968	1968	1968	1968
R^2	0.054	0.075	0.089	0.099

suggesting that the English wage premium overlaps with the wage premium for the formal labour market. A substantial English-use wage premium of approximately 26% remains, implying that English language skills are valuable, but once observable features are controlled for, this is much less than what we observe in raw comparison.

To summarise this analysis, the findings from the STEP survey clearly highlight the multilingual reality of the labour market in Ghana. While English is indeed a widely used language, crucially it is not the only language people utilise at work, and it is not the only language which is of value for labour market opportunities. We also see that for most STEP survey respondents, the workplace is not monolingual but instead multiple languages are used.

Reflecting on the STEP survey

The STEP survey provides a useful starting point for highlighting the visibility of African languages within the workplace in Ghana. The preceding analysis highlights that English is not the only language used within the labour market in the country, and that many people will use multiple languages in their daily work lives. We now reflect critically on the STEP survey design, to highlight how such surveys could more effectively collect data on the visibility of languages in multilingual contexts. We structure this critique through focusing on two main aspects: self-reports and monolingualism.

While survey responses offer a sense of self-reported language knowledge, it should be acknowledged that terms such as 'multilingual' can be interpreted in myriad ways – the rationale for one individual identifying as 'multilingual' based on their perceptions of their language skills could be very different from another. For example, individuals commonly under-value their language skills, believing themselves to be 'monolingual' despite degrees of proficiency in other languages (Fisher et al. 2020). Additionally, the term 'mother tongue' can also be interpreted and made claim to in multiple ways, often according to the relevant political, social, cultural or linguistic context (Skutnabb-Kangas and Phillipson 2012, 452–453; Pattanayak 2003; Makoni and Pennycook 2007). The concept of 'mother tongue' lacks a clear definition and has been problematised within the African context (Kamwangamalu 2005; Banda 2010; Ssentanda, Huddlestone, and Southwood 2016; Tsebe 2021). The social and cultural connotations of the term do not necessarily conform to 'language spoken from birth' and, in some contexts, a 'mother tongue' would be a language associated with an individual's heritage, which they may not in fact speak. Furthermore, while the inclusion in a survey tool of the option of a second mother language may enable respondents to provide a more accurate account of their multilingualism, it is possible that individuals may not report knowledge of a language if they do not consider it as a 'mother tongue'. This would lead to such individuals being mistakenly captured as 'monolingual'.

How, exactly, do respondents conceptualise, understand, and make claim to proficiency in different languages – what level must they have achieved, or what tasks must they be able to successfully perform, in a language, before they will claim it as part of their linguistic repertoire? We agree that gathering data on issues relating to how languages are valued in that societal context is potentially illuminating; however, there is also potential ambiguity in asking about an 'official language'. In Ghana, respondents might interpret this item as asking about English, recognised as the country's official language; however, Ghana also has the nine government-sponsored languages (Agbozo and ResCue 2020), detailed above, and respondents could infer this meaning from this question.

Furthermore, the wording of the survey fails to capture the reality for many people that different languages may be used for different activities, and different languages with different people in the home environment, depending on various family members' specific sets of skills in a range of languages (e.g. using one language with one parent, another language with the other, and yet another with grandparents, and possibly another again to engage with popular media). There are potential further complications due to perceptions around Standard versus non-Standard language

varieties. A limited number of respondents report speaking English at home. However, what English variety is being understood here? A Standard British/American English, or Ghanaian Pidgin English? This question does not capture information on how individuals use resources from different languages to communicate multilingually. However, we acknowledge the complexity associated with capturing this more accurate and nuanced picture of language practices in the home.

When considering language use at work, individuals' responses may also be constrained by any de facto language policies within the workplace. For example, as English carries prestige value within high-level domains, it may be regarded as the 'official' language of formal employment. While English may be used in 'official' communications, multiple languages may be used for different purposes, for example at home or during work to communicate with different colleagues or customers. Relying on self-reported language-use statements to investigate which languages are used, and are visible, in the labour market is fundamentally problematic, particularly in multilingual contexts.

Regarding terminological issues, the conceptualisations of language underpinning the STEP survey are a crucial point for reflection. We see a monolingual habitus (Gogolin 1997) reflected in the survey questions. While the survey does offer some options for listing knowledge and use of more than one language, this is representative of a monolingual multilingualism – a repertoire consisting of multiple monolingualisms – rather than a multilingual multilingualism (see Ndhlovu and Makalela 2021). There is a 'deep-seated habit of assuming monolingualism as the norm for all individuals and societies' (Ndhlovu 2015, 398). When constructing a survey which seeks to collect information on language use, we are then faced with the issue of how to reject the monolingual habitus and collect information which more accurately reflects individuals' use of their multilingual repertoire. For example, even if we know that individuals use both 'Akan' and 'English' at work, we do not know how they use these parts of their linguistic repertoire. Are the languages kept separate and used for different functions and with different people? Or is language use more fluid, and the boundaries between these named languages less distinct? Indeed, we not only recognise the difficulties in answering such questions themselves; we are also aware of the challenges which arise in deciding how best to describe a sociolinguistic context, if we aim to move away from traditional representations of fixed, named languages. We acknowledge that in our own outlining of the Ghanaian setting in section 2, we have not been able to find an elegant solution!

In fact, the act of producing a survey and constructing measures implies a selection of the dimensions (in Ancient Greek κατηγορια),[4] which must be operationalised and thus, leads to a simplification of the object of study. This means a transformation of some qualities into a metric which is not just a technical process, but an important feature of social life (Desrosières 2008; Hacking 1999). This process is generally called commensuration and has been largely examined by different historians, statisticians, sociologist and philosophers (Espeland and Stevens 1998). From Plato and Aristotle, to Marx, Weber, Simmel and Foucault, the implications of commensuration have been analysed as a process that influences and reflects our valuation. In this sense, the STEP survey, and others, provide an implicit simplification of a multifaceted process as language use in a multilingual country. Moreover, it is conceived from a monolingual perspective common to Western countries, ill-fitting multilingual realities. At the very least, we hope to stimulate debate and emphasise the urgency of more fine-grained proxies that enable capturing multilingual realities with survey data. Importantly, as Rassool (2013, 47–48) highlights, there may be limitations to using quantitative approaches to data collection around 'language economics'. Interdisciplinary approaches combining various data collection approaches could prove more effective in increasing understanding of the breadth of issues present when investigating links between language and the economy.

Discussion and conclusion

In this paper we have discussed what languages are currently visible within the labour market in Ghana based on results from the STEP survey, and reflected on how we can more accurately collect

data on the visibility of languages in multilingual contexts. Our discussion of the STEP survey also shows that linguistic origin strongly conditions social and economic standing and observed levels of education. In particular, there is a strong effect of linguistic origin that is unexplained in that it cannot be accounted for by relative lack of education in previous generations or geography (such as for Mole-Dagbani speakers). In some cases, however, it is clear that the linguistic disadvantage in education is mediated through the education of the previous generation or geography (e.g. Ga-Adangme and Ewe speakers). The effects of linguistic origin or earnings are, conversely, mostly accounted for by differences in education, access to formal labour markets and district of work. In that sense the socioeconomic and educational barriers that govern material disadvantage associated with language are straightforward. Some linguistic groups tend to live in less affluent regions, benefit from less formal education and are less likely to be in formal employment.

What languages are used at work in Ghana?

Our analysis of the STEP survey indicates that the Ghanaian labour market is not a monolingual space. Rather, multiple languages are used in the labour market, both in informal and formal sectors. English is a commonly used language and is associated with high earnings but it is not the sole language of value; multilingual repertoires are, too, valued. Of the Ghanaian languages used in the labour market, the STEP survey suggests that Akan is the most valuable in relation to earnings. STEP indicates that in the majority of cases, participants use two or more languages at work. English is the most common first language used in the formal sector, and Akan in the informal sector. The common perceptions surrounding English as the valuable language within the labour market are perpetuated with little regard to what languages are actually visible and used in the labour market overall. The 'neoliberal promise of English' is not necessarily reflected in the language practices found in the labour market, in which multilingual repertoires are used, and which have value for economic opportunities. Currently, Ghanaian language-in-education policy prioritises literacy in English. However, as Sah (2021, 241) highlights, educators and policy makers need to consider what languages, cultures and knowledge systems are viewed as 'valid in literacy learning', and to question the ideologies and rationale which influence decisions on validity. It is therefore imperative to reevaluate the literacy skills which individuals require to live healthy, meaningful lives in multilingual societies.

How can we better investigate the visibility of languages in the workplace?

One of the STEP survey's central limitations is that it is constructed with a 'monolingual bias' (in terms of the fixed, limiting ways that language generally and languages specifically are viewed, constraining the possibility for multilingual repertoires to be reported and therefore valued) and 'Western bias' (in terms of a range of assumptions made, for example about the definition, and individuals' lived experiences, of what it means to be literate). We have information on individual languages but no sense of how individuals might use language multilingually. Such survey tools provide a valuable resource for gathering large-scale data which is useful in enhancing understandings of skills and the labour market. If we also want surveys to capture information which enables us to understand individuals' lived multilingual realities (Reilly et al. 2022), a more nuanced approach to language may be necessary.

Our argument is that multilingualism in Ghana should be reflected in survey questions, and in asking respondents questions that reveal their multilingual repertoire. To improve future survey tools, enabling them to more accurately capture the visibility of languages, we recommend that:

- Surveys should be contextually appropriate to the multilingual reality and needs of the country, rather than a one-size-fits-all instrument that can be repeated in multiple contexts.
- Individuals should be allowed to report any skills in all the languages they can use.
- Detailed options for individual languages and dialects should be included.

- Scenario-based questions to understand how people actually use language in their everyday lives should also be incorporated.
- The sampling process should not be limited to urban areas. Conducting a survey that is representative of both urban and rural areas would improve the external validity to the results of a survey such as STEP. In fact, current estimates of multilingualism might be underestimates, if linguistic diversity is more prevalent in rural areas.

Survey questions should be designed to collect information on how individuals use their language resources. This would facilitate understanding of what language skills are actually useful for people, and of how people use language in different ways depending on who they are with, where they are, and why they are communicating. We argue that language should be considered as a fundamental factor in survey and census design. While accurately capturing the visibility of language proficiencies and use in a survey is undeniably nuanced, language issues should be treated as important economic issues (Djité 2008) and time and effort spent accurately capturing this data.

Moreover, the benefits of proficiency in less common languages remains little understood. The STEP survey is a rare example of a large-scale survey providing aggregate estimates of the frequency of use of different languages. Moreover, it is inherently difficult to infer precisely how different languages confer benefits in livelihoods, as membership of different linguistic groups is strongly associated with other features impacting on material success in life, such as education. Therefore, it is important to examine in more detail, through ethnographic and qualitative studies, how language is used in day-to-day life to understand the mechanisms through which language abilities or lack thereof may enable or hinder livelihoods and participation. In establishing this stance on the value of such future directions, we nonetheless take care to align ourselves with authors such as Flores (2013) and Kubota (2016) in recognising that foregrounding lived multilingual realities (Reilly et al. 2022) is not a simplistic solution to actually addressing the inherent inequalities and power imbalances that persist regarding access to labour market opportunities. Another fruitful avenue for exploration is, furthermore, that language variables should be included in the large-scale social surveys that are routinely conducted to maintain national statistics, in order to monitor how language is associated with life outcomes and how this is mediated through functions of the state such as education and health care.

Notes

1. This is accessible online at: https://microdata.worldbank.org/index.php/catalog/2015/related-materials.
2. This is in keeping with established practice in international labour market research following Mincer (1974). For an overview see e.g., Heckman, Lochner, and Todd (2006).
3. Note, however, that these figures only refer to the primary language at work, and we are not attempting to attribute earnings to a second language spoken.
4. In Latin 'categoria'.

Acknowledgements

We would like to thank the Scottish Funding Council for funding the projects that this paper is based on. Rosario Scandurra also acknowledges the support of the Juan de la Cierva Incorporación Programme (ref. IJC2019-040056-I).

Disclosure statement

No potential conflict of interest was reported by the author(s).

Funding

This work was supported by Scottish Funding Council.

ORCID

Colin Reilly http://orcid.org/0000-0001-5236-1041
Elvis Rescue http://orcid.org/0000-0001-7414-9287

References

Agbozo, E. G., and E. ResCue. 2020. "Educational Language Policy in an African Country: Making a Place for Code-Switching/Translanguaging." *Applied Linguistics Review* 12 (4): 503–522. doi:10.1515/applirev-2020-2002

Akuoko, P. B., V. Aggrey, and A. Amoako-Arhen. 2021. "Ghana's Informal Economic Sector in the Face of a Pandemic." *Social Sciences & Humanities Open* 3 (1): 100094. doi:10.1016/j.ssaho.2020.100094

Anderson, A. J., N. Ansah, G., and Mensa A. P. 2008. "Domains of English in Ghana and its Use for Specific Purposes." In *English for Academic and Specific Purposes in Developing, Emerging and Least Developed Countries*, edited by M. Krzanowski, 122–130. Canterbury: Darwin College.

Appleby, R. 2002. "Language in Development Constrained: Three Contexts." *TESOL Quarterly* 36 (3): 323–346. doi:10.2307/3588416

Banda, F. 2010. "Defying Monolingual Education: Alternative Bilingual Discourse Practices in Selected Coloured Schools in Cape Town." *Journal of Multilingual and Multicultural Development* 31 (3): 221–235. doi:10.1080/01434631003658073

Batibo, M. 2014. "Searching for an Optimal National Language Policy for Sustainable Development." In *Language Rich Africa Policy Dialogue: The Cape Town Language and Development Conference: Looking Beyond 2015*, edited by H. McIlwraith, 16–20. London: British Council.

Bodomo, A., J. Anderson, and J. Dzahene-Quarshie. 2009. "A Kente of Many Colours: Multilingualism as a Complex Ecology of Language Shift in Ghana." *Sociolinguistic Studies* 3 (3): 357. doi:10.1558/sols.v3i3.357

Bourdieu, P. 1991. *Language and Symbolic Power*. Cambridge: Polity & Basil Blackwell.

Bruthiaux, P. 2000. "Practical Interdisciplinarity in Language Education and Development Economics." *Journal of Multilingual & Multicultural Development* 21: 269–291. doi:10.1080/01434630008666405

Coulmas, F. 1992. *Language and Economy*. Oxford: Blackwell.

Crystal, D. 2003. *English as a Global Language*. Cambridge: Cambridge University Press.

Dako, K., and M. A. Quarcoo. 2017. "Attitudes Towards English in Ghana." *Legon Journal of the Humanities* 28 (1): 20–30. doi:10.4314/ljh.v28i1.3

Davis, E., and J. S. Agbenyega. 2012. "Language Policy and Instructional Practice Dichotomy: The Case of Primary Schools in Ghana." *International Journal of Educational Research* 53: 341–347. doi:10.1016/j.ijer.2012.04.007.

Desrosières, A. 2008. "La statistique, outil de gouvernement et outil de preuve." *L'argument Statistique I : Pour Une Sociologie Historique de La Quantification*, 7–20. doi:10.4000/books.pressesmines.909

Djité, P. 1990. "The Place of African Language in the Revival of the Francophonie Movement." *International Journal of Sociology* 86 (1): 87–102. doi:10.1515/ijsl.1990.86.87.

Djité, P. 2008. *The Sociolinguistics of Development in Africa*. Bristol: Multilingual Matters.

Djité, P. 2020. "Economy and Language in Africa." In *Bridging Linguistics and Economics*, edited by Cécile Vigouroux, and Salikoko Mwefene, 182–202. Illinois: The Chicago University Press.

Djité, P. G. 2021. "Gaps in Sociolinguistic Research in Sub-Saharan Africa." *International Journal of the Sociology of Language* 267-268: 91–98. doi:10.1515/ijsl-2020-0062

Eberhard, D. M., G. F. Simons, and C. D. Fennig, eds. 2022. *Ethnologue: Languages of the World*. SIL International. Online version: http://www.ethnologue.com.

Erling, E. J. 2014. *The Role of English in Skills Development in South Asia: Policies, Interventions and Existing Evidence*. London: British Council.

Erling, E. J., L. Adinolfi, and A. K. Hultgren. 2017. *Multilingual Classrooms: Opportunities and Challenges for English Medium Instruction in Low- and Middle-Income Contexts*. The Open University. https://www.theewf.org/uploads/pdf/r-english-medium-instruction-inlowand-middle-income-contexts.pdf.

Espeland, W. N., and M. L. Stevens. 1998. "Commensuration." *Annual Review of Sociology* 24: 313–343. doi:10.1146/annurev.soc.24.1.313

Fisher, L., M. Evans, K. Forbes, A. Gayton, and Y. Liu. 2020. "Participative Multilingual Identity Construction in the Languages Classroom: A Multi-Theoretical Conceptualisation." *International Journal of Multilingualism* 17 (4): 448–466. doi:10.1080/14790718.2018.1524896

Flores, N. 2013. "The Unexamined Relationship Between Neoliberalism and Plurilingualism: A Cautionary Tale." *Tesol Quarterly* 47 (3): 500–520. doi:10.1002/tesq.114

Gazzola, M., F. Grin, and B. A. Wickström. 2016. "A Concise Bibliography of Language Economics." In *The Economics of Language Policy*, edited by M. Gazzola, and B. A. Wickström, 53–92. Cambridge, MA: MIT Press.

Gogolin, I. 1997. "The Monolingual Habitus as the Common Feature in Teaching in the Language of the Majority in Different Countries." *Per Linguam* 13: 2. doi:10.5785/13-2-187.

Grin, F. 2003. "Language Planning and Economics." *Current Issues in Language Planning* 4 (1): 1–66. doi:10.1080/14664200308668048

Grin, F. 2013. "Language and Development: A General Introduction and a Few (Critical) Considerations." In *English Policy Forum Organised by the British Council in Santiago*. www.britishcouncil. cl/sites/britishcouncil.cl2/files/escrito-francois-grin.pdf.

Grin, F., C. Sfreddo, and F. Vaillancourt. 2010. *The Economics of the Multilingual Workplace*. New York: Routledge.

Hacking, I. 1999. *The Social Construction of What?*. Cambridge, MA: Harvard University Press.

Heckman, J. J., L. J. Lochner, and P. E. Todd. 2006. "Earnings Functions, Rates of Return and Treatment Effects: The Mincer Equation and Beyond." *Handbook of the Economics of Education* 1: 307–458. doi:10.1016/S1574-0692(06)01007-5

Heller, M. 2009. "The Commodification of Language." *The Annual Review of Anthropology* 39: 101–114. doi:10.1146/annurev.anthro.012809.104951

Kamwangamalu, N. M. 2005. "Mother Tongues and Language Planning in Africa." *Tesol Quarterly* 39 (4): 734–738. doi:10.2307/3588533

Kamwangamalu, N. M. 2016. *Language Policy and Economics: The Language Question in Africa*. London: Palgrave.

Kubota, R. 2016. "Neoliberal Paradoxes of Language Learning: Xenophobia and International Communication." *Journal of Multilingual and Multicultural Development* 37 (5): 467–480. doi:10.1080/01434632.2015.1071825.

Laitin, D. D. 1994. "The Tower of Babel as a Coordination Game: Political Linguistics in Ghana." *American Political Science Review* 88 (3): 622–634. doi:10.2307/2944799

Lo Bianco, J. 2001. *Language and Literacy Policy in Scotland*. https://www.scilt.org.uk/Portals/24/Library/publications/languageandliteracy/Language%20and%20literacy%20policy%20in%20Scotland_full%20document.pdf.

Makoni, S., and A. Pennycook. 2007. "Disinventing and Reconstituting Languages." In *Disinventing and Reconstituting Languages*. Vol. 62, edited by S. Makoni, and A. Pennycook, 1–41. Clevedon: Multilingual Matters.

Mfum-Mensah, O. 2005. "The Impact of Colonial and Postcolonial Ghanaian Language Policies on Vernacular Use in Schools in Two Northern Ghanaian Communities." *Comparative Education* 41 (1): 71–85. doi:10.1080/03050060500073256.

MICS-EAGLE. 2020. *Ghana Education Fact Sheets 2020: Analyses for Learning and Equity Using MICS Data*. Ghana: UNICEF.

Mincer, J. 1974. *Schooling, Experience, and Earnings*. New York: Columbia University Press.

Ministry of Education, Ghana & Ghana Education Service. 2014. *Foreword. An Integrated Approach to Literacy Teacher's Guide, Kindergarten 2*. Accra: MOE/GES.

Ndhlovu, F. 2015. "Ignored Lingualism: Another Resource for Overcoming the Monolingual Mindset in Language Education Policy." *Australian Journal of Linguistics* 35 (4): 398–414. doi:10.1080/07268602.2015.1087365.

Ndhlovu, F., and L. Makalela. 2021. *Decolonising Multilingualism in Africa: Recentering Silenced Voices from the Global South*. Vol. 26. Bristol: Multilingual Matters.

Negash, N. 2011. "English in Africa: An Impediment or a Contributor to Development." In *Dreams and Realities, Developing Countries and the English Language*, edited by H. Coleman, 161–184. London: British Council.

Obeng, S. G. 1997. "An Analysis of the Linguistic Situation in Ghana." *African Languages and Cultures* 10 (1): 63–81. doi:10.1080/09544169708717813.

Ògúnwálé, J. A. 2012. "Harnessing the Multilingual Factors of Nigeria for Development: The Challenges and Strategies." *Mediterranean Journal of Social Sciences* 3 (13): 203–213. doi:10.5897/IJEL12.035.

Osei-Boateng, C., and E. Ampratwum. 2011. *The Informal Sector in Ghana*. Friedrich-EbertStiftung: Ghana Office.

Owu-Ewie, C. 2006. "The Language Policy of Education in Ghana: A Critical Look at the English-Only Language Policy of Education." In *Selected Proceedings of the 35th Annual Conference on African Linguistics*. Somerville, MA: Cascadilla Proceedings Project. 76–85.

Pattanayak, D. P. 2003. "Mother Tongues: The Problem of Definition and the Educational Challenge." In *Towards a Multilingual Culture of Education*, edited by A. Ouane, 23–28. Hamburg: UNESCO Institute for Education.

Pennycook, A. 2008. "Praise for Language as Commodity: Global Structures, Local Marketplaces." In *Language as Commodity: Global Structures, Local Marketplaces*, edited by R. Rubdy, and P. Tan, xii. London: Continuum.

Phaahla, P. 2015. "Economics of Languages: The Interplay Between Language Planning and Policy, and Language Practice in South Africa." *South African Journal of African Languages* 35 (2): 181–188. doi:10.1080/02572117.2015.1113003

Pomerantz, A. 2002. "Language Ideologies and the Production of Identities: Spanish as a Resource for Participation in a Multilingual Marketplace." *Multilingua* 21 (2-3): 275–302. doi:10.1515/mult.2002.012.

Pool, J. 1972. "National Development and Language Diversity." In *Advances in the Sociology of Language, Volume II (Selected Studies and Applications)*, edited by J. Fishman, 213–230. The Hague: Mouton.

Probyn, M. 2009. "'Smuggling the Vernacular Into the Classroom': Conflicts and Tensions in Classroom Codeswitching in Township/Rural Schools in South Africa." *International Journal of Bilingual Education and Bilingualism* 12 (2): 123–136. doi:10.1080/13670050802153137.

Quarcoo, M., and E. K. Amuzu. 2016. "Code-Switching in University Students' Out-of-Classroom Academic Discussions." *Issues in Intercultural Communication* 4 (1): 1–14.

Rassool, N. 2013. "The Political Economy of English Language and Development: English vs National and Local Languages in Developing Countries." In *English and International Development: Policy, Pedagogy and Globalization*, edited by E. J. Erling and P. Seargeant, 45–67. Bristol: Multilingual Matters.

Reilly, C., M. M. Bagwasi, T. Costley, H. Gibson, N. C. Kula, G. Mapunda, and J. Mwansa. 2022. "'Languages Don't Have Bones, So You Can Just Break Them': Rethinking Multilingualism in Education Policy and Practice in Africa." *Journal of the British Academy* 10 (4): 1–20. doi:10.5871/jba/010s4.001.

Reilly, C., E. ResCue, and J. J. Chavula. 2022. "Language Policy in Ghana and Malawi: Differing Approaches to Multilingualism in Education." *Journal of the British Academy* 10 (4): 69–95. doi:10.5871/jba/010s4.069.

Roberts, A. 2007. *A History of the English-Speaking Peoples Since 1900*. London: Harper Collins.

Roy, J. 2014. *The Impact of Lowering of Academic Standards on Educational Outcomes: Evidence from an Unusual Policy in India*. Unpublished PhD dissertation, Princeton, NJ.

Sah, Pramod K. 2021. "Reproduction of Nationalist and Neoliberal Ideologies in Nepal's Language and Literacy Policies." *Asia Pacific Journal of Education* 41 (2): 238–252. doi:10.1080/02188791.2020.1751063

Sen, A. 1999. *Development as Freedom*. Oxford: Oxford University Press.

Skutnabb-Kangas, T., and R. Phillipson. 2012. "'Mother Tongue': The Theoretical and Sociopolitical Construction of a Concept." In *Status and Function of Languages and Language Varieties*, edited by U. Ammon, 450–477. Berlin: de Gruyter.

Ssentanda, M., K. Huddlestone, and F. Southwood. 2016. "The Politics of Mother Tongue Education: The Case of Uganda." *Per Linguam: A Journal of Language Learning* 32 (3): 60–78. doi:10.5785/32-3-689.

Strauss, G. 1996. "The Economics of Language: Diversity and Development in an Information Economy." *The Economics of Language: Language Report* 5 (2): 2–27.

Stroud, C. 2001. "African Mother-Tongue Programmes and the Politics of Language: Linguistic Citizenship Versus Linguistic Human Rights." *Journal of Multilingual and Multicultural Development* 22 (4): 339–355. doi:10.1080/01434630108666440

Stroud, C., and C. Kerfoot. 2021. "Decolonizing Higher Education. Multilingualism, Linguistic Citizenship and Epistemic Justice." In *Language and Decoloniality in Higher Education: Reclaiming Voices from the South*, edited by Z. Bock, and C. Stroud, 19–46. London: Bloomsbury.

Tefeh, J. B. 2020. "Functions of Code-Switching in the English Language Classroom: A Case of Dambai College of Education, Ghana." *International Journal of Research and Scholarly Communication* 3 (2): 33–50. https://royalliteglobal.com/ijoras/article/view/684/315.

Tembe, J., and B. Norton. 2011. "English Education, Local Languages and Community Perspectives in Uganda." In *Dreams and Realities: Developing Countries and the English Language*, edited by H. Coleman, 114–136. London: British Council.

Trudell, B. 2007. "Local Community Perspectives and Language of Education in Sub-Saharan African Communities." *International Journal of Educational Development* 27 (5): 552–563. doi:10.1016/j.ijedudev.2007.02.002

Tsebe, A. T. 2021. "The Epistemology of (m) Other Tongue (s): What Does This Mean for Language in Education?" *The Journal for Transdisciplinary Research in Southern Africa* 17 (1): 1–8. doi:10.4102/td.v17i1.1068

Williams, E. 2011. "Language Policy, Politics and Development in Africa." In *Dreams and Realities, Developing Countries and the English Language*, edited by H. Coleman, 39–56. London: British Council.

Wright, L. 2002. "Language as a 'Resource' in South Africa: The Economic Life of Language in a Globalising Society." *English Academy Review* 19 (1): 2–19. doi:10.1080/10131750285310031

Yevudey, E. 2017. *Bilingual Practices in Ghanaian Primary Schools: Implications for Curriculum Design and Educational Practice.* Unpublished PhD dissertation, Aston University.

Zhang, W., and G. Grenier. 2013. "How Can Language be Linked to Economics? A Survey of Two Strands of Research." *Language Problems and Language Planning* 37 (3): 203–226. doi:10.1075/lplp.37.3.01zha