

REFLECTIONS ON THE MULTIPLE LANGUAGES SPOKEN IN ENGLAND AND ALASKA, DIGITAL CONNECTIONS AND ONLINE TRANSLATION SERVICES FOR READING AND LITERACY NEEDS

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ABSTRACT

Technology advancements has enabled communication regardless of language barriers in a variety of languages across countries and states around the world but also within the same country/state due to digital translation applications and advancements in algorithm solutions over the last 45 years. For instance, software applications including translation services make reading documents and general literacy more accessible for all. These developments have enabled communities from different ethnic backgrounds to communicate more efficiently within close proximity as well as at a distance as detailed in Latham (2024 [1]). This paper includes a summary of languages spoken in England and Alaska as a comparative study because they are located in the same hemisphere quarter. Over 5 million (approximately 5,249,362) outputs/results were handled during this reflective work. A document can now be translated fairly quickly from one language to other languages within minutes. This hasn't always been the situation and this reflective paper focuses on this as well as documented evidence of the impact of Coronavirus (COVID-19) in the two locations. Achieving a digital connection to communicate information is an aspect of this paper because this links to the 2016 theme of Making Digital Count [2] and can assist in COVID-19 Recovery planning.

KEYWORDS

Languages spoken in England COVID-19 Recovery early years social geography digital-data storage development comparative secondary data study

1. INTRODUCTION

The main language of English is spoken in Alaska and England and they are both located in the Northern Western Hemisphere however, in both locations there are also numerous other languages spoken within communities and families. Dependent on the ethnicity or simply the choice of the parents some early years services including emergency services have had to recognise that there are a variety of languages spoken [especially with babies and young children] in England and Alaska. These languages also include sign language (British Sign Languages) which are a necessity when children or parents are deaf.

Accessing a non-emergency services often requires the individual to be an active initiator and therefore, this individual needs to be able to speak and read to find, retrieve and secure the information that they need. The *Coronavirus (COVID-19)* pandemic challenged many aspects of society in England and Alaska despite the different locations [within the same hemisphere quarter] and transport options. Schools, shops, health centres, libraries and businesses closed (or limited their customer services schedules) due to the LOCKDOWN restrictions imposed and

recommended by the main authorities. The pandemic and LOCKDOWN criteria in both locations was communicated by the media and digitally-connected services and systems. Information was published on websites (and linked to government/local authority sites mainly from Public Health teams). Finding and reading (and then understanding) the LOCKDOWN guidelines was vitally important. Consequently, *readability of websites* and other trusted literacy (stored on the internet) was heightened. This way of working has continued in many non-emergency working teams and families during the Coronavirus (*COVID-19*) COVID Recovery years.

It's a good idea for a website owner to have an understanding or at the very least have an insight into social geography together with social and human capital and in doing so we can develop our business intelligence and emotional intelligence as discussed in Latham 2024 [1]. The '*readability*' of a website as well as the skill of 'reading' is important for a '**facilitator-educator**' model of work, for it to be successful work. It's important to recognise that reading skills are not universal and some populations do have poor vision (or no vision: blindness). Reading skills were discussed in a recent publication, Latham 2025 [3], re: dyslexia learning problems, literacy problems and future impacts for this adult population.

2. METHODOLOGY

A comparative method was chosen for this reflective work and involved 'secondary data searches' and 'secondary data handling' methods for 'non-fiction' literature. This required of a range of databases to be selected as below. Digital connectivity was essential. Technology to access, handle and store the data and then complete a variety of admin tasks associated with data handling and reporting was also essential. The technology used for this work included a laptop and a mobile phone both with reliable digital connectivity. The data bases selected were:

- 3 databases of published 'non-fiction' works from government websites/sources in England and Alaska
- 5 online [library style] database services of 'non-fiction' journal publications or academic literature.

2.1. Results

The results are a range of outputs and evidence (numerical and qualitative data) generated from these searches. Over 5 million (approximately 5,249,362) outputs/results were handled during this task.

Whilst the focus of this paper is languages in England and Alaska, this reflective work does not include slang or other informal/casual colloquialism as different forms of languages as this is not necessary for this paper. Problems that can create child, and adult, reading and comprehension literacy challenges (such as dyslexia and dyscalculia) are also outside the remit of this not reflective report.

3. DISCUSSION OF RESULTS

This section is separated into 9 discreet sections.

3.1. Developing Knowledge for ‘Database Storage and Retrieval’ Is Similar to an Online Library

Do we develop knowledge for online database storage systems? Yes, and an example of this is a 2006 ‘nutrition focused’ publication: NESS synthesis report. This report was mentioned on page 23 in a 2013 report: Social Policy in a Cold Climate [4]. As detailed in the abstract of this paper it states,

it [the 2013 report] was part of ‘a series of working paper which form the first stage of a programme of research, designed to examine the effects of the major economic and political changes in the UK since 2007, particularly their impact on the distribution of wealth, poverty, income inequality and spatial difference’.[4]

According to the document [4], the research took place between October 2011 and May 2015 and aimed to include analysis of policies and spending decisions from the last period of the Labour government (2007-2010), including the beginning of the financial crisis, including those made by the Coalition government since May 2010. The programme was funded by the Joseph Rowntree Foundation and the Nuffield Foundation, with London-specific analysis funded by the Trust for London. The 2013 report states,

A review of breastfeeding support in Sure Start Local Programmes found “promising early benefits” from a range of different programmes, with some SSLPs able to report an increase in breastfeeding rates (not all programmes had effective monitoring systems in place to provide comparable data over time) (Latham et al., 2006). [4. p23]

This is a good example of how developed knowledge (as reported for example in a 2006 report) has been retrieved because it was initially created from a database storage system. Plus the database storage system is therefore, similar to an online library system where literature (and in this example, non-fiction literature) has been uploaded (or inputted) in a methodical way so enable it to be found and then retrieved. This 2013 report [4] includes 111 references and details the problems with the policies, the failure to alleviate child poverty but the **achievement** of improving more qualified early years workers and improved paternity support.

The NESS work has contributed to digital data storage development work within the computer science industry for archiving, data monitoring, benchmarking and analysis (including algorithm tasks) to assist in the management of public (and private) service related problems. This was prior to the explosion of social media applications. The National Evaluation of Sure Start 2006 publications work detailed numerous themes relating to *antenatal and postnatal nutrition* services including information on the variety of different ethnic backgrounds of children living in Sure Start areas, the range of languages used and the multi-disciplinary teams involved. The work and lessons learnt such as ‘good practise’ can still be utilised today because of the *NESS database work and transparency* developed in the NESS team. For the purpose of this reflective report, Table 1 (in the appendices) was created from one of these old 2006 NESS reports (cost-effectiveness focus report [15]) and it provides a concise summary of the intended aim of this 2006 NESS ‘synthesis report’. This new summary (Table 1) will also add to the knowledge base and will be stored in an online database and therefore, will be retrievable in the future similar to a library service.

Table 1, was created from the original report for the purpose of this 'reflective report'. Table 1, provides a clear summary of the aims, objectives, requirements, measurable outputs and expected outcomes at that time for this new child and family community service where poverty related problems and dilemmas were already known in England. Consequently, it's still relevant today due to the focus on early years service and the demands on essential COVID-19 Recovery plans that many businesses and people are currently managing and living with.

The Sure Start initiative was an early years programme for England and not a UK or Great Britain wide programme. This is also included in ref [4] report. The evidence that a more skilled workforce was achieved was also reported in other NESS reports in 2006. Therefore, there's a clear agreement between these teams as reported in these reports. Myers et al [5], for instance, also stated, that many programmes have recognised that opportunities for stimulating 'language and communication development' occurred in every setting and every activity that parents, carers and children experience.

3.2. Early Years Work: Supporting Children and their Language Development

The SaLSR report [5] cites 11 reports (from a data base of 745 documents) that provided detailed information concerning this aspect of service delivery. This synthesis report was created by utilising a database system which held 745 documents. Most of the 745 documents, during the synthesis work, were found to be 'not relevant' to the topic of 'speech and language [SaL]' despite this being an important aspect of the Sure Start work (see Table 1 in the appendices for a summary of the required work of Sure Start). The 11 relevant reports revealed that much time and resource had been placed on increasing staff's awareness of their communication, providing them with competent skills to deliver communication enriched services and be able to detect speech and language delays more easily. This was achieved through a combination of training sessions and speech taking place. Additionally, programmes had developed resources that assisted staff in extending their knowledge and skills pertaining to speech and language development, often featured as part of staff training' [5, p32]. Staff completed 'self-report questionnaires' and reported positive experiences of the training and support they received, including:

- Increased confidence in identifying language problems
 - More able to identify speech and language delay
 - Improved knowledge of developmental milestones, associated with communication
 - Understanding of the importance of language enriched environments,
 - Improved ability to implement language enriched activities
 - Greater understanding of child development
- [5, p. 32]

Many of the Sure Start programmes were working with multi-ethnic families and approx 14 languages were being spoken nationally in these programmes when English wasn't the main language. This would have required the speech and language focused workers to develop their understanding of the main languages being spoken and used in the 3-year old child's home. This would then extend to working with the family and main carers of these children. Some Sure Start programmes also developed services for young parents, grandparents and father's groups. Consequently, many of these communities were also multi-ethnic communities hence, bi-linguists, multi-linguists and interpreters were needed to work within the early years teams.

A more recent 2025 online search provided the result of 20 journals [6] when using the phrase search '*child early years and speech and language support*' which can help to ascertain the current importance of this area of work with children. The specialist areas of these 20 journals

ranged from early childhood education, otorhinolaryngology (ENT), neuro surgery to Digital Education and Educational Technology. The search was completed on a website which has a 'database profile' of over 3,000 journals. The 20 journals are listed below and this list provides evidence that this topic has international recognition across both hemispheres.

1. Journal of Autism and Developmental Disorders
2. Journal of Developmental and Physical Disabilities
3. The Egyptian Journal of Otolaryngology
4. BMC Pediatrics
5. Early Childhood Education Journal
6. International Journal of Early Childhood *****
7. Journal of Psycholinguistic Research
8. Behavior Research Methods
9. Reading and Writing
10. Indian Journal of Otolaryngology and Head & Neck Surgery
11. Education and Information Technologies
12. Review Journal of Autism and Developmental Disorders
13. Journal of Child and Family Studies
14. Universal Access in the Information Society
15. Advances in Neuro developmental Disorders
16. BMC Psychology
17. European Journal of Pediatrics
18. European Archives of Oto-Rhino-Laryngology
19. Maternal and Child Health Journal
20. International Journal of Speech Technology

3.3. Languages Spoken in Alaskan Communities that are Not English

A 2025 Google search [on a smartphone] using the search phrase 'languages spoken in Alaska' almost instantly, resulted in the following results, collated and summarised from 5 online websites [7]:

- ✓ 20 native languages at least in Alaska belonging to 4 distinct families and/or 6 large tribes (in the past it was over 300 native languages) are spoken by aprox 6% of the population
- ✓ Central Yup'ik and Inupiak are the most popular Alaskan native languages
- ✓ French (including Cajun) is spoken by aprox 2,115 Alaskans
- ✓ 3.5% of the population speak Spanish
- ✓ Some Russian, Tagalog and Hawaiian languages are spoken
- ✓ The oldest Russian speaking community is in Alaska
- ✓ 4 native Alaskan native languages are dying (reported in 2018) in Alaska: Haida, Tsimshian, Han & Upper Tanana
- ✓ 84%- 86.3% speak English (this is expected to be American English or Canadian English and/or British Columbia English)

Alaska had a population of approximately 740,150 in 2024 [7] and compared to other North American states it's very populous. It doesn't border America and has a longer coastline than all the other US states combined. There are 3 main universities in Alaska [in the towns of Anchorage, Fairbanks & Juneau] with several smaller satellite campuses in smaller communities (such as Sitka and Ketchikan). When searching for information on the internet we can also start to consider whether the written information (literature) that we are reading is intended for America-English speakers, Canadian-English, or British-English. For instance, information related to

and/or sourced from within Alaska, we would expect the main English language to be used in literature based on the knowledge that 84-86% of the population speak English. The English language in Alaska may well be American-English but it could also be Canadian-English due to the geographical proximity to the border of Canada. Currently, in the media there are tensions in Canada possibly due to political unrest and COVID -19 Recovery times with stories such as Canada will become the 5th state of America and no longer be an independently ruled country. This will have an impact on Alaska due the shared border with Canada.

3.4. Languages Spoken in English Communities that are Not English

In England, the 2021 Census [8] recorded that whilst English is the main spoken language there are other languages regularly spoken (see Table 2 in appendices) such as: British Sign Language (BSL in deaf families), Polish, Romanian, Punjabi (or Panjabi), Urdu, Portuguese, Spanish, Arabic, Bengali, Gujarati, Italian, French and Chinese languages.

The 2021 census as reported by ONS records shows the highest percentage of people who had Polish as a main language was in the East Midlands region (1.5%, 71,000) in England. The data shows that the percentage of people with Polish as a main language varied across local authorities from 0.1% (100) in Castle Point to 5.7% (4,000) in Boston. The next most common main language in England was reported as Romanian (0.9%, 466,000). The region with the highest percentage of people who reported Romanian as a main language was London (1.9%, 159,000). In particular, the local authority of Harrow had the highest percentage of its population reporting Romanian as a main language (7.5%, 19,000). In the early 2000's, the NESS team were aware that languages such as Panjabi (punjabi) and Urdu were popular languages spoken in Sure Start families both of which originate from South Asia (and are normally accepted as widely spoken languages in India and Pakistan). In England [8], the highest percentage of people that had Punjabi as a main language was in the West Midlands (1.4%, 83,000). The area in the West Midlands with the largest percentage of people with Punjabi as a main language (6.5%, 17,000) was Wolverhampton. The English region with the overall largest proportion of people who had Urdu as a main language was the North West (0.8%, 59,000). However, Slough in the South East was the local authority with the largest proportion (4.3%, 7,000) of Urdu main language speakers. Each of these areas were traditional Sure Start areas.

The 2021 ONS census survey [8] reports that, in addition to spoken languages, British Sign Language (BSL) was the main language of 22,000 (0.04%) residents aged 3 years old and more, across England [and Wales]. This is an increase of over 6,000 since 2011 (15,000, 0.03%). Within England, BSL is the main language of just over 21,000 people (0.04%). This percentage is slightly higher than in Wales, where just over 900 people (0.03%) have BSL as a main language. Across the two nations, the area with the highest percentage of people with BSL as their main language was Derby (400, 0.2%), as it had been in 2011 (300, 0.1%). One possible reason for this was reported, that the Royal School for the Deaf is situated in Derby, hence, children have access to both BSL and English studies. For those who move for educational purposes, they then may remain in this location (Derby) because of an active Deaf community.

The ONS [8] report states that, for households that did not have English as a main language, assistance in completing the ONS census questionnaire was provided through interpretation services, and translation leaflets were made available in over 50 languages. This was the approach needed (and sometimes implemented) in the early stages of the Sure Start programmes. Other languages (which are smaller in use in families/communities) were recorded by ONS 2021 (see Table 2 in the appendices) and these have changed since the start of the Sure Start days.

The ONS 2021 report [8] shows that the region of England with the highest percentage of people with English as a main language was the North East region (96.5%, 2.5 million), whereas London had the lowest percentage (78.4%, 6.7 million) of people whose main language was English.

3.5. What About the Impact of *Coronavirus (COVID-19)* - Did Communities in England Suffer?

The results of a 'search of articles' using the phrase '*child early years and covid-19*' resulted in 12,419 outputs hence, we can estimate that there are 12,419 articles with a focus on COVID-19 and *child early years work* [6]. The 12,419 articles haven't been verified for their content in terms of relevance, reliability and validity for this reflective report. What has been ascertained is that they were mostly written and published in English (English, 12,408 articles; German, 10 articles; Dutch, 1 article) and the website has a translation service to enable the search and retrieval of the information.

The published data on the ONS website shows that there wasn't a big difference of English language ability in the rates and numbers of deaths due to *Coronavirus (COVID-19)* in England [9] despite variations in socio-demographic characteristics. More white British [non-disabled] adults [10, 20] were reported as *COVID-19* cases than any other ethnicity and the most affected lived in large populous areas (cities, towns) in the most deprived locations (north west region of England, followed by London and the south east region). The data shows [11] that there were no babies or child deaths that were associated with the early weeks of the *Coronavirus (COVID-19)*. However, there were 39 babies (less than a year old) that died at a later time [between March 2020 and June 2023] either due to or involving *COVID-19* in England (and Wales) [10].

Due to this sudden rise in deaths for all ages (as it was reported as a global disease and therefore, recognised as characteristic of a pandemic) a new classification was required - during the pandemic weeks as well as now for *COVID-19* Recovery plans. Table 3 (see the appendices) details the main new 2021 World Health Organization (WHO) international definitions of these *COVID-19* disease classifications [20]. This classification was required to clarify whether the deaths were due to *Coronavirus (COVID-19)* or whether the patients also had other problems so their deaths weren't solely associated with *Coronavirus (COVID-19)*, hence, just '*involving*' it. There were 8,333 deaths overall including the 39 baby deaths [21]. At this point, it's important to acknowledge Table 4 (in the appendices) which provides details of the average age of people that died [21]. This gives evidence that older people - that were aged in their late 70 years of age and early 80 years of age (by median and mode average analysis) died compared to other aged people within a 41-month timescale (March 2020 to July 2023)[21]. Females that died in the 41 month timescale were older than the males that died [21]. This data was handled (stored and analysed) in a variety of ways and the data sets are available to meet transparency requirements.

We can ascertain from this transparency of information that some (maybe many) of these older adults that died during *Coronavirus (COVID-19)* were grandparents. So the focus on children services is still relevant today. The rise in adult deaths was also found in other countries and should be informing *COVID-19* Recovery plans. One team at Newcastle University, England, completed a post-*COVID-19* report [11] after conducting interviews with practitioners from schools and a nursery. This paper describes the impact of *COVID-19* restrictions on classroom practices and the nature of partnerships with parents including the negative impact on children's early language and communication development. Ethical approval was granted by Newcastle University along the BERA ethical guidelines [12]. Many of the children prior to the *COVID-19* closures [due to the national pandemic and 'lockdown measures' imposed criteria] were receiving Speech and Language support. Twenty schools participated in the Language Intervention in the Early Years (LIVELY) project, Early Years Practitioners (EYPs) and Early Years Foundation

settings. They were invited to talk about their support for language and communication development and the impact COVID-19 had on this. Eleven practitioners completed semi-structured interviews and data was collected such as the quote below,

*Whole classes were sent home if one member of a bubble tested positive.
In January/March 2022 when schools were no longer using bubbles,
COVID-19 outbreaks were on the rise causing significant disruption
but with individual absences rather than whole classes [11]*

The Newcastle University researchers interviewed 11 practitioners, from 10 schools and 1 nursery in the North East of England. Whilst there were some positive outcomes, their study showed that the number of children with language and communication needs increased, with younger children generally showing a bigger decline in attainment than older children.

Social and emotional development was the greatest concern for parents and Early Years Practitioners. Language development, physical development and educational outcomes were also areas of concern. The Early Years practitioners were supporting a growing number of children with additional needs in this area and emphasised that *children from socially disadvantaged groups are at greater risk*. Support had to be achieved at a distance. The findings were mixed, for instance,

1. EYFS children accessing learning through a 'Zoom classroom' required support from a parent which was not always viable. Children from more deprived schools had less access to electronic devices.
2. Home visits could not happen, and communication with children and parents was conducted remotely, sometimes even when restrictions eased
3. Throughout the pandemic, all settings experienced high levels of staff absences, some had vulnerable staff working from home. This often resulted in fewer staff being available, affecting the quality of teaching.
4. the creation of small groups in settings and opportunities for online support evolved
5. the number of child absences resulted in the child-adult ratio being smaller, resulting in greater progress.
6. Disrupted staffing levels and child absences meant most settings were not able to cover the full curriculum
7. We still have regular parent's evenings, not face to face, but via telephone
8. Some settings used competition to encourage parents to work with their children, for example a Christmas reading challenge encouraged some reticent parents to participate.
9. During COVID-19, videos were created to model skills, for example how to blend sounds or read wordless picture books. Some interviewees especially valued examples of two-way communication. A small number of parents recorded themselves working with their children, allowing EYPs to see how they were modelling language and communication.
10. Positive progress made by children at home was attributed to time spent with parents or siblings, but this was not possible for all.

Surprisingly, this 2024 report [11] doesn't mention any specific family or community language aspects relating to child services included in the study. Languages in many parts of England do create further challenges for service providers especially early years services. Supporting families when their main language hasn't been English, for instance, has been a priority.

Over 20 years ago, the work of the National Evaluation of Sure Start (NESS) found and confirmed the fact that socio-economics were found to be linked with poor child health [13].

The data has been used for wider 'data set' analysis and developing children's services social policy all prior to the Coronavirus (COVID-19) pandemic and can also be utilised in these COVID-19 Recovery years.

The NESS work (2000-2006) was able to include the different types of families in England (as opposed to other parts of Britain) by marriage status, family size, parental status, age, disability, ethnicity, religious/belief status and language acquisition. These are still important considerations for service providers today. This can include access to transport, shops and emergency services and not just the expected basic/regular health and education services but also including recreational spaces (theatres, cinemas and parks). Detailed in 2004 [13, p40, section 1.1.2], the SSLP areas contained more residents experiencing long-term unemployment than the rate for England, with correspondingly less short-term unemployment. Also relevant was the large percentages (average 41%) of SSLP residents with no qualifications, a rate 42% higher than that for England. Increased efforts to develop adult literacy provision was included such as average distances to study courses were particularly great in the North East and South West [13, p. 9]. Plus more unemployment and a high percentage of residents with zero school qualifications which implies poor literacy skills compared to the national average. Poor literacy skills is bad news for future employment in England just as it is in other locations around the world.

3.6. What About the Impact of Coronavirus (COVID-19) - Did Communities in Alaska Suffer?

More older, white people in Alaska died during the 2021 compared to other years between July and December [14]. Similar to England, many (or some) of these older adults would have been grandparents. This was the Delta wave timescale and equates to 47% more deaths than expected for this time period. Whilst there were no 'early years' aged child deaths related to Coronavirus (COVID-19) there were some that were hospitalized during this time. As detailed in [14], 23 children were hospitalized and 11 of these were aged 0-4 years old (no details specifically about 'early years' services in this USA state are included in this reflective report).

3.7. Does a Range of Non-English Speaking Families Create Additional Costs on Early Years Services?

When a team doesn't speak the main language of the consumers [so in this example the 3 year old children and their families] it does require, especially for emergency situations, that team workers can communicate effectively to ensure the child is safe. Otherwise, the child is 'at risk' of being even more vulnerable. Additional costs are always incurred in emergency situations compared to non-emergency situations. Speaking the same language should increase efficiency of services.

The NESS 2006 'cost effectiveness' report [15] aimed to synthesize the financial aspects of evidence of Sure Start activities, at that time. This report clearly explains and details the structure and aims of these **early years** child and family services, as previously mentioned in Table 1 (see appendices). Sure Start programmes were required to ensure that they were delivering good value for money. The 1st round of SSLPs began in 1999 for instance, as stated in the report. The 2013 report [4] however, implies that the Sure Start services started in 1997. The SSLP's started to work towards 4 objectives as detailed in Table 1. Hence, there was structure and accountability from the startups.

Many Sure Start local programmes also had completely new buildings for their work. A large part of the funding was spent on the business premises [many of which became children's

centres), the capital new builds. NESS 2006 published work confirmed that SSLPs represented an intervention unlike almost any other undertaken devoted to enhancing the life prospects of young children growing up in disadvantaged families and communities. Sure Start was different - in that it was area-based - with all children under 4 years and their families living in a prescribed area. *The NESS team understood that each SSLP aimed to improve existing services and/or create new ones as needed in ways that were respectful, inclusive, involving, participative and responsive to the needs of parents.* This approach was to be different to past professional practices that were more hierarchical and formal with expertise. Parents and community control were to be facilitated in the development of new partnerships with providers as detailed in NESS reports [5,13,15].

The information in Table 1 and Table 2 (see appendices) provide evidence that it was obvious that there was a lot of planning required in the implementation stages (and years). Therefore, teams would have needed to develop their skills very quickly to be successful for every child and family from the start. Often this speed of delivering a new service (including a new building) isn't possible for all especially if a range of family or community languages are not available within a team. Often there are some losers when a new business is launched because the service (and hence, teamwork) is not established, especially when there are a variety of different languages being spoken within different families on a local and national scale. This would include Sign Languages for deaf families. The importance to document any successes (and failures) was vital, hence, the mutual agreement within the NESS team to produce synthesis reports was decided. Today, we can still benefit from this NESS team decision due to the continued success of the digital world and initiatives like the Making Digital Count theme [2].

3.8. COVID-19 Recovery Years

So it's now over 25 years since the launch of some of the [early trail blazer] Sure Start local programmes and it might be important to consider now whether the buildings still exist and the early years work has been sustainable. Especially, post-COVID-19 and these COVID Recovery years. Or whether the buildings have been re-purposed because they are no longer needed (this could be due to low birth rates, baby deaths or the movement of families or just the baby) in these specific communities. Perhaps alternative early years businesses have evolved such as home-based businesses. The buildings were a major part of the financial expenditure. Utilising space is an important part of urban planning especially if the buildings are publicly owned. Baby deaths and, more so, the increase in 'older adult' deaths in England and Alaska due to COVID-19 has highlighted the need for emergency, and other services, to work with efficiency with the diverse families regardless of their main spoken languages.

The 2006 cost-effectiveness report [5, p.8] showed evidence that the programmes found cost effectiveness evaluation a difficult task to undertake. A search of the NESS local evaluation database of 745 reports using the term 'cost-effectiveness' returned 70 documents, of which only 47 provided any relevant data (the rest making only a passing reference to cost-effectiveness as an exercise that was either planned or proving difficult to conduct).

3.9. Finding Information on the Internet - Have Online Translation Services and Algorithms Helped?

The National Evaluation of Sure Start research detailed numerous themes relating to *antenatal and postnatal nutrition* services including information on the variety of different ethnic backgrounds of children living in Sure Start areas and the range of languages used and the multi-disciplinary teams involved. Hundreds of documents were analysed during the NESS team synthesis work [1,5,15] similar to a meta-analysis style of working. The work required

methodical and systematic thinking, including the implementation stages of the work, at various levels to handle the range of complex and more simple tasks. This is also what algorithms do in computer sciences and the associated tasks. The NESS work, and other large data-set work, has helped to enable the computer science industry to develop systems for data storage, data monitoring and analysis (including algorithm tasks) to assist in the management of public (and private) service related problems.

Websites and systems like Academia.com, intranets and digital storage system services also help the algorithm tasks when seeking and transferring important knowledge by providing access to it, and then facilitating these and other procedures. For instance, the results of the search phrase 'languages spoken in Alaska' generated results almost instantly[7]. This procedure is possible due to the design and 'ease of use' of numerous digital storage systems which is impossible to be matched by a librarian in a 'physical, face-to-face' library service. The [7] results included the Russian historical language details, controversial historical terminology such as Eskimo and Inuit associations with this part of the north western hemisphere. This is very different to the Anglo-Saxon and British heritage of England and consequently, the English language spoken (and read) in England. The geographical location of Alaska being close to Canada and America can also help us to understand algorithm tasks (and their design) and how they handle (link or not link) documents and translations from, and to, Canadian-English and American-English, for instance. This type of translation service requires the nuances of similar English languages to be more defined, clarified and explained which are very important in many emergency situations and can help in the financial [economic] efficiency of these associated emergency services.

Algorithm findings [results and outputs] are derived from different types of resources and therefore, the findings generated are often of mixed design. This was clearly explained in the NESS 2006 reports [1,5,15]. A search on the Academia [16] online system for instance, using the phrase 'cost-effectiveness' resulted in 38 outputs [papers] in June 2025. Some of these reports focused on 'cost-benefit analysis' and not 'cost-effectiveness' and most were written in English (one written in a Russian Language and another written in an Ukrainian language). The Academia website organised these 38 papers into 4 sections:

- ✓ Economic Efficiency 10 papers
- ✓ Healthcare Cost Effectiveness 10 papers
- ✓ Cost-Benefit Analysis 9 papers
- ✓ Public Policy Evaluation 9 papers

The same search on the Wiley website [17] in June 2025 using the phrase 'cost-effectiveness' resulted in over 2 million (2,042,403) outputs (results). The results were sorted and categorised as below:

- ✓ 3 books
- ✓ 12,366 reports/papers in journals
- ✓ 54 Industry insights - papers
- ✓ 2,029,980 articles and chapters

On this day, the Wiley website service had 3 types of publications which totaled over 2 million (2,029,980) outputs (results) [17] sources of literature available to read as below across a vast range of subjects :

- ✓ 1,785,680 Journals
- ✓ 215,377 Books
- ✓ 28,923 Reference works

Both the Academia website and the Wiley website contained literature mostly written in English for this ‘cost-effective’ search whereas a search on the Academia online system using the word ‘nutrition’ resulted in 3,093,100 outputs which were written in 9 different languages (see Table 5 in appendices for more details). This reflective report isn’t attempting to include nutrition search results however, it does provide evidence of the capacity of this digital database for different languages, translation and algorithm tasks. The results page also shows that the majority of this information was shared on the system between 2020-2025 [16].

4. CONCLUSION

Finally, on reflection, the many websites have been designed to hold large quantities of information in a similar format as an encyclopedia, dictionary, library or shop. Over 5 million (approximately 5,249,362) outputs/results were handled during this *reflective task*. Therefore, these websites need to ensure they have large data storage facilities whilst others don’t need a large memory capacity for data storage. This is because some website owners have planned, designed and launched their websites to be educational resources [for their readers, i.e. consumers] and the design of their websites (i.e. *facilitator-educator* designs) use hyperlink techniques that help to avoid duplicates of the same information. Consequently, the *facilitator-educator website design* doesn’t need a large data storage system. This type of website design is a facilitator model of work design. It’s a resource and is designed along the lines of ‘educator’ to provide information and a referral resource and this has been symbiotic with the developing digital industry sector. Similar to a library or citizen advice service where people physically go [or contact] to acquire answers to their questions. Post COVID-19, this model of work design can work perfectly well, dependant on 2 main factors. The 2 main factors are ‘*do the people have digital connections? and can they read?*’

In 2025, [COVID Recovery times] we expect adults to have good levels of *readability* and if this is not possible we expect adults to be *fluent* in the main spoken language of their residence. When data searches result in over 5 million (approximately 5,249,362) outputs/results adults need to be able to make sense of this information and finally identify what’s important or more useful within a reasonable timescale. If a language isn’t available within the ‘online translation’ services this can provide problems as well as opportunities for future planning. So if there are over 20 languages being spoken in different locations within the same hemisphere, like England and Alaska, for instance, people do need to easily access translation services in both emergency and non-emergency situations to effectively communicate and understand. Whilst non-emergency services can have delayed translation services in some circumstances, this way of working will also create further tensions depending on the task of the day. Consequently, digital connectivity and algorithm work should be very helpful in these difficult situations.

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APPENDICES**Contains 5 Tables:**

Table 1

Table 1 Summary of the ‘aim’ of the 2006 NESS synthesis report: ‘cost-effectiveness’ (see reference 15 for the main report)				
How did the new early years, child and family, services start?	There was no specific model of how local services should be changed or what exactly should be delivered. The only directive was that partnerships were to provide local community influence on the design of each SSLP to implement interventions to support the core services			
Was is a new early years, early intervention to improve child health?	Sure Start was an extensive and new early intervention programme. One of the aims of Sure Start was to generate improved levels of social capital and self-confidence to tackle social exclusion within deprived neighbourhoods.			
What were the main objectives for each of the Sure Start local programmes	Initially, the objectives were to: 1. Improve social and emotional development 2. Improve health 3. Improve children’s ability to learn 4. Strengthen families and communities			
What was Sure Start programmes intending to deliver? I.e. outputs, targets and outcomes	OUTPUS	TARGETS	OUTCOMES	
	The services being delivered by programme	Indicators/ milestones that services are achieving their objectives	Key features in the life and circumstances of children, families and communities. These include cognitive and socio-emotional development, health, educational qualifications, employment and earning	
Did the Sure Start programmes have Public Service Agreements (PSA) to measure their progress against?	The initial 4 PSA’s			
	1. reduction in the number of children aged 0-3 who are re-registered on the child protection register within a twelve month period (an indicator of social and emotional support)	2. reduction in the proportion of women who continue to smoke during pregnancy (a key health indicator)	3. reduction in the number of children with speech and language problems requiring specialist intervention by the age of four (a key child learning indicator)	4. reduction in the number of children aged 0-3 who live in workless households (a key indicator for poverty, social capital and strengthening families and communities)
What teams were recruited ?	Outreach and home visiting team Support for families and parents team Support for good quality play, learning and childcare experiences for children team			

	<p>Primary and community health care and advice about child health and development and family health team</p> <p>Support for people with special needs, and helping access to specialised services team</p>
Which main public service took the lead and responsibility?	NESS found that Health-led SSLPs for instance, appear to get services up and running sooner, as indicated by their quicker rate of spend. There was some evidence in the NESS synthesis reports of the Sure Start Local Programmes implementation effects which will impact on cost-effective nessat this early stage.
What timescale was measured to give evidence of the impact of this new early years service?	NESS also found that it takes time for Sure Start Local Programmes to develop and that it is not until the 3rd financial year of operation that most SSLPs are spending allocated funds to an extent indicating widespread effects on services.
Was there any evidence of SSLP cost effectiveness in their local evaluation reports	A search of the NESS local evaluation database (which stored 745 reports) using the term 'cost effectiveness' resulted in 70 reports and during the synthesis work only 47 provided any relevant data.

Table 2

Table 2 Languages used in smaller communities/families, aged 3 years old and older, as their main language, 2021, within local authorities in England and Wales (ONS 2021) [8]						
Welsh			Persian/Farsi		African languages:	
Gaelic	Romany	Albanian	Pashto	Mandarin	Amharic	
Irish	Manx	Ukrainian	West or	Chinese	Tigrinya	
Gaelic	Slovak	Bosnian	Central Asian	Cantonese	Somali	
Scottish	Czech	Croatian	Languages	Chinese	Krio	Caribbean
Cornish	Republic	Serbian		Japanese	Akan Yoruba	
Scots	Lithuanian	Montenegrin	Hindi		Igbo	
Ulster	Latvian	Yiddish	Pakistani	Korean	Swahili or	Creole:
Scots	Hungarian	Turkish	Pahari	Vietnamese	Kiswahili	English-based
Irish	Bulgarian	Hebrew	(with Mirpuri and Potwari)			Caribbean
Traveller	Bulgarian	Kurdish		Tagalog or	Luganda	Creole,
Cant	Greek	other	Bengali	Filipino	Lingala	
	Dutch	Eastern	(with Sylheti and Chatgaya)	Malay	Shona	Any
Oceanic	Swedish	European			Afrikaans	other
or	Danish	languages				Caribbean
Australian	Finnish	other	Gujarati	other East	any other	Creole
language,	Estonian	Northern	Marathi	Asian	Nigerian	
	Slovenian	European	Teluga	languages	language	
	Maltese	languages	Tamil			
North or		any	Malayalam	other Chinese	any other	
South	other	Romanian	Sinhala	languages	West African	
American	European	language,	Nepalese		language	
any other	languages,		Other South		any other	
sign			Asian		African	
languages			languages		language	

Table 3

Table 3 International Classification of Diseases, Tenth Edition (ICD-10) codes for COVID-19 [20]			
Definitions table 1: Deaths involving COVID-19 definitions		Definitions table 2: Deaths due to COVID-19 definitions	
ICD-10 code	Description	ICD-10 code	Description
U07.1	COVID-19, virus identified	U07.1	COVID-19, virus identified
U07.2	COVID-19, virus not identified	U07.2	COVID-19, virus not identified
U09.9	Post-COVID condition, unspecified		
U10.9	Multi-system inflammatory syndrome associated with COVID-19, unspecified	U10.9	Multi-system inflammatory syndrome associated with COVID-19, unspecified
In early 2021, new International Classification of Diseases, Tenth Edition (ICD-10) codes for COVID-19 (U09.9 and U10.9) were issued by the World Health Organization (WHO). Created from the datasets published by ONS, 23rd August 2023			

Table 4

Table 4 Average age of death of people (adults) whose death was due to COVID-19 or involved COVID-19, in England and Wales [21]					
Month	Sex/ gender	Involving COVID-19 (Median) Average age	Involving COVID-19 (Mean) Average age	Due to COVID-19 (Median) Average age	Due to COVID-19 (Mean) Average age
41-month total (March 2020 to July 2023)	All People	82	79.8	82	79.9
	Males	81	78.3	81	78.3
	females	84	81.5	84	81.7
Created from the datasets published by ONS, 23rd August 2023 (Sheet 2) [21]					

Table 5

Table 5 Total resources by language (using the word search 'nutrition') on the Academia site on 10.6.2025 [16]		
Total resources = 2,404,243		
Quantity of Literature on the website [16] by written language	English	2,206,581
	Spanish	47,067
	Portuguese	54,930
	Indonesian	32,007
	French	23,630
	Turkish	12,756
	Russian	4,527
	German	2,679
	Polish	0

