Practitioner Perspectives on the challenges of implementing 'alternative' early childhood education (ECE) provision for nomadic children in Mongolia

Dr Julia Morgan[1]
[1]University of Greenwich
Old Royal Naval College
Park Row
London, UK
SE10 9LS
j.e.morgan@gre.ac.uk
(corresponding author)

And

Dr Tumendelger Sengedorj[2]
[2]Mongolian National University of Education
Peace Avenue
210648 Ulaanbaatar
Mongolia
stumee_09@yahoo.com

Author contribution

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Declaration of Interest

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Highlights

In-depth qualitative analysis of interviews with 24 key informants adds to the limited literature on early childhood provision for nomadic children.

Understanding practitioner perspectives is an important part of the policy implementation process.

Adequate funding and increased policy focus on alternative provision are required to improve the implementation of programs including factors to do with staff terms and conditions, staff training, access, quality, and sustainability of provision.

Policy of 'one child one type of provision' makes it difficult to achieve equity between children who attend alternative provision (ger kindergartens) and those who attend fixed provision. Alternatives are suggested.

Abstract

Investment in early childhood education (ECE) is seen as key to improving life chances for children from economically disadvantaged backgrounds. Children from nomadic backgrounds often face difficulties in accessing ECE services because of geography, lack of services and the mobility of families. However, the provision of these services is seen as important in reducing educational inequalities between nomadic and non-nomadic children as well as in improving school readiness. Mongolia's alternative provision policy for nomadic children is often presented as a case study of how ECE services can be provided for nomadic peoples. However, there is little to no literature on how this alternative provision policy is experienced on the ground by practitioners and the subsequent impact on front line staff and children. This research explored the perspectives of ECE practitioners in Mongolia, who are engaged in providing services to nomadic children, to understand their views on how the policy on alternative provision was experienced. Semi-structured interviews with 24 key informants were undertaken in 4 areas of Mongolia over the period 2019-2020. Practitioners highlighted issues around the funding of ECE alternative provision which impacted not only on sustainability of the programs but also impacted on access to programs, the resources available, the duration of programs and the quality of programs. Moreover, factors such as the qualifications of staff and a lack of teachers were highlighted. We conclude that appropriate funding is key in ensuring effective implementation of provision and identify areas of need in relation to ECE practitioner training as well as factors related to practitioner terms and conditions that require attention. Furthermore, some rethinking of the policy of 'one child one type of provision' needs to be undertaken as it leads to a lack of equity in relation to access and quality of provision between nomadic and non-nomadic children.

Keywords: nomadic children; Mongolia; early childhood education; alternative provision; implementing policy; qualitative

Introduction

Globally, Early Childhood Education (ECE) has garnered much attention because of its role in improving children's educational experiences including increased retention rates in school, improved school readiness, enhanced brain development and improved educational outcomes (Heckman & Masterov, 2007; Lynch, 2005; World Bank, 2017). The World Bank has also highlighted the importance of investment in ECE, especially for low- and middle-income countries, to facilitate competition in a rapidly changing global economy as well as a potential poverty and inequality reduction strategy (Denboba et al., 2014). The Sustainable Development Goals (SDGs) Target 4.2 highlighted that by 2030 countries should "ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education". However, across the world ECE provision is not equitably distributed and investment in ECE in some countries is minimal resulting in only half of the world's children being enrolled in pre-schools (UNICEF, 2019). This is especially the case in low-income countries where only 1 in 5 children have access to ECE (UNICEF, 2019). This is seen as problematic as early childhood education is said to have an impact on improving life chances amongst the most economically disadvantaged children and countries (UNICEF, 2019; Rao et al., 2014; Britto et al., 2016).

Mongolia's Sustainable Development Vision 2030 placed emphasis on early childhood education (ECE) as being key to society with the Vision aiming to ensure the enrolment of 90%

of age-appropriate children (ages 2-5 years old) into preschool education settings by 2030 (Government of Mongolia, 2016: 27) with an update in 2020 that all children aged 5 years will be "properly prepared for primary school" (Government of Mongolia, 2020: 48). The aim of ECE in Mongolia is to "establish a basis for lifelong education that is appropriate to the age, skills and creativity of children through care and protection services and educational training activities" (cited in Government of Mongolia, 2020:37). Although, Mongolia spends around 24% of its education budget on early childhood education which resulted in approximately 62% of all ECE provision being publicly funded, disparities exist within Mongolia in relation to access and quality of ECE in rural and urban areas and between nomadic herder children and non-nomadic children (World Bank, 2017; Government of Mongolia, 2020).

ECE 'Alternative' Provision for Mongolian Nomadic Herders

Mongolian herders are nomadic pastoralists who travel from place to place across "the Steppe" with their animals, family, and belongings to find good pasture. Roughly 20% of Mongolians are nomadic herders (Gardelle & Zhao, 2019) and poverty rates are particularly high amongst this group (Batkhuyag & Dondogdulam, 2018). Because of the nature of nomadic lifestyles, including constant moves in isolated rural areas, it is often logistically and financially challenging to provide ECE services. This can result in nomadic herder children having limited access to local pre-school education as they are often some distance from provision as well as being some distance from each other. Coupled with the extreme temperatures in Mongolia and the geography early years provision is difficult and expensive to provide (World Bank, 2017). The Government of Mongolia (2020) estimated that around 11.5 percent of children who attended pre-school provisions were from herder families and nomadic herder children often have worse

education outcomes compared to other children (Batkhuyag & Dondogdulam, 2018). As UNICEF (2019:34) have stated it is important to focus upon ensuring "hard to reach" groups have access to quality early childhood education so to "narrow existing gaps instead of widening them".

Whilst children who live in urban areas in Mongolia access fixed kindergartens, children who are nomadic in rural areas access a range of both fixed kindergartens in regional administrative towns (Aimag regional centers and Soum district centers) or access alternative types of ECE services if they are based too far away from the Aimag or Soum center where the fixed provision, normally attached to a school, will be. Alternative preschool education programs were introduced, by the Government of Mongolia, in the late 1990s to increase enrolment of nomadic children who were not enrolled in fixed kindergartens and generally consists of visiting teachers, and ger kindergartens as well as recent pilots of home-based education.

Ger kindergartens are relatively common in rural areas in Mongolia, are free to attend and usually run in the summer months (between 21-62 days) for around 8 hours per day. The summer months are normally when ger kindergartens are available because of the difficulty in providing services in the winter months due to the Mongolian weather and because of a lack of staff with many of the staff working in the ger kindergartens during their summer holidays from the fixed provision. Gers are temporary structures like yurts, which nomadic people in Mongolia live in and thus the ger kindergartens, where provision takes place, can be packed up and moved from place to place to follow the herders as they seek new pasture for their animals (Batkhuyag & Dondogdulam, 2018). This movement of the ger kindergarten, thus, enables the continuation of ECE provision to young children. Some of the ger kindergartens are open for 7 days a week over the summer period and the World Bank (2017) found that the mean number of hours that children

attended in one week was 58 with 10 percent of children only attending kindergarten for 16 hours or less in one week. Given the short period of time that ger kindergartens are available (summer months only) and contrasted with fixed kindergarten provision, which is open from September to June, 8 hours day, five days a week, this means that may herder children have very little exposure to ECE (World Bank, 2017).

Children will be dropped off at ger kindergartens by their parents or other relatives, often by motorcycle, in the morning and then picked up later that day after the parents have finished working tending their animals. Whilst at kindergarten children of all ages mix in one room and are offered food, an opportunity to socialize with other children (this is important as many children may not have seen any other children because of the distance they live from each other) and take part in a range of activities normally underpinned by the Mongolian early year's curriculum. The staff in the ger kindergartens are usually managed by the pre-school lead in the fixed kindergarten in the Soum center. Very often charities such as UNICEF and Save the Children will finance the ger kindergartens and supply learning materials, early years curriculum and furniture whilst the cost of the teacher's salaries are normally met by the fixed kindergarten through government expenditure (World Bank, 2017). However, it has been shown that costs related to parental contributions to resources as well as factors such as "seasonal clothing" are barriers to attending kindergartens for the most disadvantaged children (Government of Mongolia, 2020). Moreover, a comparison of ger kindergartens in relation to fixed kindergartens found children in the fixed provision outperformed those in the ger kindergarten on all ECEMI quality indicators except for interactions (World Bank, 2017).

Another form of alternative ECE provision which is available to nomadic herder children in remote areas of Mongolia is what is known as mobile or visiting teachers. Early years professionals will travel, often large distances, to visit herder families and provide ECE services for a couple of hours, once a month, working both with the parents and the child (including sometimes siblings who are at home and not of early years age). Lastly, a few pilots of home-based education provision have also taken place in Mongolia by Non-Government Organizations (NGO's) such as Save the Children Japan. This was targeted at 5-year-old children and was seen as a school readiness intervention for those starting school at age 6. Parents were given a box which contained materials such as toys, books, and videos as well as workbooks to go through with their children and were shown how to use them by teachers in the fixed pre-school provision in the Aimag centers. Parents could exchange the boxes every 2 weeks for another box; there were 10 boxes in total (Tserendorj, 2017). Whilst parents are exchanging their boxes, it was normal practice in many settings for children to be bought along so that the fixed kindergarten teacher could assess their learning and the child could get used to the setting. Early childhood pedagogy stresses the importance of involving parents in supporting young children's learning at home and parent/pre-school relationships are seen important especially for the most disadvantaged children (Dowd et al., 2014; Dowd et al., 2017; Fernald et al., 2009). Moreover, it has been shown that children with involved parents, for example, tend to do better in relation to a wide range of outcomes such as reading, emotional development and success in learning (OECD, 2018). Evaluations of the ECE home-based programs in Mongolia found that, compared to ger kindergartens, children were significantly more likely to have better outcomes in a range of key skills; however, there were quality issues with the evaluations and thus caution is needed in relation to interpretation (World Bank, 2017).

By 2018, 23, 705 herder children were enrolled in alternative ECE services and about 3 billion tughriks (over 1 million USD) was spent on this service (MECSS et al., 2019; Government of Mongolia, 2020). Moreover, it has been estimated that 69% of the children who enrolled in alternative services were enrolled in ger kindergartens whilst 12% were enrolled in the visiting teacher's service (MECSS et al., 2019).

Implementing Early Childhood Education Policy

Policy can be defined as a "purposive course of action followed by an actor or a set of actors" (Anderson, 1975; ETF, 2013) whilst implementation has been defined 'as a specified set of activities designed to put into practice an activity or program of known dimensions' (Flixsen et al., 2005: 5). For ECE initiatives to be implemented successfully the program or policy must be well defined including the goals, the end-users, the goodness of fit with the community, the duration of the program, the key components of the program and how it will be delivered. Of importance is an analysis of the supporting structures and resources which are in place to ensure that the program can be implemented successfully (Metz et al., 2016). This includes. for example, an overview of staffing levels, needs analysis, financial resources, equipment, buildings and appropriate curriculum. Competency drivers such as levels of staff knowledge and training also need to be taken into account as well as an understanding of parental resources, for example literacy and time, in relation to home-based education initiatives. Metz et al (2016) have argued that that this type of analysis is often overlooked in the implementation stage and thus can be a barrier to effective implementation of programs. The importance of the collection of data on the outcomes of initiatives is also key to ensure effectiveness, continual quality improvement and sustainability.

The implementation of policy can often be haphazard and challenging on the ground and sometimes what is implemented differs from what is set out in policy documents (Franks & Schroeder, 2013) leading to a type three error. Thus, effective evidence-based programs and policy can be poorly implemented (Flixsen et al., 2005). Conversely, it can also be the case that ineffective policy and practice, which has little impact on children's outcomes, can be implemented effectively (Fixsen & Blasé, 1993; Fixsen et al., 2001). The ideal scenario is where effective evidence-based programs and policies which improve children's outcomes are implemented successfully (Flixen et al., 2001).

In low- and middle-income countries although there has been an increase in the introduction and implementation of early childhood policies and programs including early childhood curriculum and standards (Vargas-Barón, 2015), there is very little research on ECE implementation (Franks and Schroeder, 2013). What is available highlights issues around access to ECE and also issues around the quality of early child provision in many countries in relation to buildings; the qualifications and experience of pre-school teachers; practitioner-child ratios; the amount of funding available; the curriculum as well as materials and supplies (Woodhead et al., 2009; Mitter and Putcha, 2018; Neuman et al., 2015; Richter et al., 2016). Moreover, access to ECE may be prioritized over quality of provision to meet financial constraints and enrolment targets (Spier et al., 2019). However, this focus on access can be problematic as the benefit of early childhood education depends on the quality of provision and poor-quality provision can be associated with negative effects on children's learning and development (Britto et al., 2011). In relation to quality two aspects have been identified which are of interest: structural aspects and process quality (Slot et al., 2017). Structural factors relate to physical, material, and human resources such as staff education, group size, the building and context within which ECE takes

place as well as early childhood materials such as books and toys. Process factors focus upon parental involvement, staff-child interactions, and pedagogy as well as aspects of care and emotional support (Slot et al., 2017).

There is very little literature, however, on nomadic children and ECE implementation and policy. Ng"asike (2014) found that many of the early childhood education programs, offered to Turkana pastoralist children in Kenya, were based on pedagogical practices which privileged western knowledge and thinking which can often 'alienate' children from their culture and lifestyle. This is echoed by Modica et al. (2010) who highlighted the importance of ECE programs being based on local child-rearing practices which incorporate aspects such as local materials and are reflective of the children's day to day culture and cultural practices. This includes ensuring that ECE takes place in structures that are familiar to the children such as huts and other types of buildings such as gers. It has also been stressed that educational provision needs to be "complementary to rather than in competition with" nomadic livelihoods (Dyer, 2014: 180) and hence it is important that ECE provision reflects these lifestyles and livelihoods and at the same time is conducive to the continuation of nomadic lifestyles.

In relation to ECE provision and nomadic herder children in Mongolia, Dabla (2013) identified that teachers in both kindergartens and primary schools needed more training on how to engage with children who had very little ECE experience; that more information on school readiness was required by parents and relatives to ensure that their children were school ready; and that primary school teachers needed to have more of an understanding of the early years curriculum so that they were better able to support children. Moreover, previous literature has highlighted that staff in ger kindergartens tend to be less qualified with approximately half of

teachers in alternative ECE programs being non-professionals (UNICEF, 2014). Whilst the World Bank (2017) stated that the shorter period of ECE provision that is offered to nomadic children through ger kindergartens (over the summer months) in Mongolia is insufficient to overcome inequities in relation to school readiness between nomadic herder children and other children who receive fixed all year provision and their report highlighted substantial differences between the cognitive and non-cognitive skills of both groups. Many of these issues have been discussed in the Government of Mongolia's Education Sector Mid Term Review (2020) which further identified the importance of kindergarten assistant teachers as a possible solution to low staffing levels; the importance of continuous professional training courses to improve kindergarten teaching standards; challenges with inappropriate learning materials; and expanding alternative provision for herder children including more flexible support programs (distance learning) to engage parents in their children's education. This recent policy, therefore, appears to put more emphasis on parental/home-based programs which was not evident in previous policy.

UNICEF (2019) has identified Mongolia as offering "creative solutions", that other countries can learn from, in expanding access to early childhood education, through the use of alternative provision, for nomadic children. However, there is minimal literature on how this has been achieved on the ground and the possible challenges that arise as well as no literature from the perspectives of practitioners who are implementing the policy in kindergartens and at local, regional, and national government level. Understanding the perspectives of practitioners has been identified as being key for active implementation of policy (Flixsen et al., 2005) as practitioners offer an important 'bottom-up' insight into service delivery, the reality of changes and the facilitators and barriers to implementation in practice They are thus, an important part of the implementation process. This present study took place in 4 areas of Mongolia over the period

2019-2020 with semi-structured interviews being undertaken with 24 key informants. The objective of the study was to explore practitioner's experiences of policy implementation in relation to 'alternative' provision for nomadic preschoolers in Mongolia to understand the challenges of implementing early childhood policy for this group of mobile children. This has relevance to other groups of nomadic peoples worldwide, for example the 20 million pastoralist households (de Haan et al., 1997 cited in FAO, 2016) as well as hunter gatherers and Roma/Gypsies and Travellers, who often struggle to access quality early childhood services.

Materials and Methods

Qualitative fieldwork took place in two aimags (regions) of Mongolia and the independent municipality of Ulaanbaatar (capital city) in 2019 and a third aimag over the winter of 2020 (these latter interviews were carried out remotely because of Covid 19). The research took place before the publication of the Government of Mongolia (2020) Mid-Term Review. Different sites were visited over the summer of 2019 including ger and fixed kindergartens in rural areas as well as NGO offices and regional education offices. This resulted in 24 semi-structured interviews being carried out with a range of key informants including local government ECE Education Officers, ECE researchers, central government Education Officers, visiting ECE teachers, ger kindergarten managers and teachers, fixed kindergartens teachers and managers responsible for visiting teacher initiatives; and ECE specialists from international NGO's. These informants were selected because they offered a range of perspectives on the implementation of ECE policy for nomadic children and were either responsible for the implementation of the policy both nationally or regionally or were pre-school teachers or managers of kindergartens who had direct experience of

how the implementation of the policies impacted on day-to-day work and children's experiences. Qualitative fieldwork was, thus, the method of choice to gain an in-depth understanding (Silverman, 2010). The interviews were conducted in Mongolian and English. Those that were conducted in Mongolian were translated into English during the interview by the second researcher. All interviews were also recorded and translated verbatim into English afterwards. After each interview the researchers discussed the main points from the interview, and this iteratively informed the following interviews where relevant. The interviews that took place remotely via skype were conducted in Mongolian and then were transcribed into English later by the second researcher. Topics that were explored in the interviews were: background to alternative provision for nomadic children and why it is needed; experiences of alternative provision; positive outcomes for children of alternative provision; challenges of implementing alternative provision; what more needs to be done in relation to implementing alternative provision. All interviews started with an open question 'please tell me about your experiences of alternative ECE provision for nomadic children'. The interviews then focused upon the topics above but were also guided by the narratives of the informants with questions asked to elucidate further understanding. As well as interviews, unstructured observations were undertaken in two ger kindergartens and two fixed ECE provisions which supported home based learning. These observations focused on the nature of the provision in relation to the learning environment, staff-child relationships, curriculum, and day to day running of the provision. Notes and reflections were recorded. Lastly, 10 parents and grandparents were spoken to briefly during the observations about their views on provision.

University ethical approval was obtained, and informed consent was given by all participants to take part in the interviews. No ethical issues arose and confidentiality and right of

withdrawal was ensured (Bryman, 2012). In relation to positionality, both researchers were female university academics with specialisms in early childhood development and education, one researcher was Mongolian, and the other was white British. The Mongolian researcher was known professionally to some of the education officers and staff from the non-government organizations (NGO's) from previous work she had carried out and this facilitated easier access to other key informants. The British researcher had also previously carried out research in Mongolia. Our positionality may have impacted the interviews in relation to the ger and fixed kindergarten staff as well as the parents and we were conscious of possible power dynamics which can arise due to perceived status differences as well as the nationality of the primary researcher and hence spent considerable time in these provisions getting to know staff, children, and parents.

NVivo 20 was used to analyze unstructured qualitative data as it has benefits in relation to managing data and ideas as well as visualizing data (Jackson & Bazeley, 2019). First, the interviews were read several times to get an overall feel for the narratives. Second, the texts were uploaded into NVivo, and codes generated through a process of inductive open coding of each line of the interviews to identify patterns in the data. Lastly, these preliminary codes were then combined into five overarching themes. Both researchers analyzed the data independently and negotiated the final themes.

Results

The following section explores the main themes that arose across interviews about the challenges of implementing alternative provision for nomadic children.

Staffing Issues

Informants highlighted several staffing issues relating to the implementation of alternative provision. It was stated that because ger kindergartens took place over the summer months many of the teachers from the fixed provision were taking their leave and thus had to work during their leave or were not available. This resulted in an over-reliance on retired kindergarten teachers to staff the provision plus the use of unqualified staff and teachers without kindergarten experience (UNICEF, 2014). Practitioners viewed this as problematic because of the nature of the children who attended ger kindergartens who had little prior exposure to pre-schools, and it was stated that:

> Some children have high achievement because of high quality of teachers whilst others are poorly managed and not taught by qualified early years teachers…this impacts on their achievement as many of these children have not seen anyone outside of their family and not had any input into their learning and unqualified early years staff can find this difficult (Government Education Officer).

Whilst the use of retired kindergarten teachers could be seen as a good use of limited resources, some had been retired for many years and did not have access to continuous professional training to update their knowledge leading to concerns about the quality of their practice. The professional qualifications of the kindergarten staff were seen by practitioners as an important element in the quality of provision and it was stated:

> Our mobile teacher is not pre-education teacher ….the music teacher is not professional teacher too. We need to think about the quality of the teaching and the needs of young children and this is directly related to their qualifications (Fixed Kindergarten Manager).

The lack of pre-school teachers was seen to impact on the sustainability of the alternative pre-school program:

> We think that the mobile teacher and ger kindergarten services are key to continue the alternative training program sustainably. We need to increase the number of mobile teachers and teacher's salary, as well as to set their position as an official position at the organization. In some aimags we are preparing primary education teacher for the program due to lack of professional teachers of pre-school education. Without appropriately qualified staff the provision is not sustainable (Government Education Officer).

Pay and conditions were brought up by almost all practitioners. It was stated that some visiting teachers were "not happy" and were "tired and angry with overloaded jobs and low pay". Others stated that the "job was not reliable and good qualified teachers won't do it". Moreover, one Kindergarten Manager described how if they did not have enough money for visiting teacher salaries, they would not use them and instead gave the learning package to parents; this contributed to the unstable working conditions for visiting teachers. A regional ECE education officer said that "earnings (for visiting teachers) were not standardized, legislated, or regulated" and that "due to the lack of human resources and teachers plus the herder's nomadic lifestyle, teachers were not able to take leave days". One visiting teacher told us about one visit and stated "it took us 4 days last year to visit one family. I did not receive accommodation and travel costs for the visit, and I had to pay myself".

Geographical, timing and duration issues related to alternative provision

Geographical issues were apparent in relation to access to ger kindergartens and to the visiting teachers accessing families. Given the often-hostile weather conditions in the winter

months in Mongolia, this meant that visiting teacher provision only took place in certain months. Moreover, families who were very remote were not visited by teachers because of the difficulties in accessing them so received no ECE input and one mobile teacher told us that "it is impossible to cross over the river if it is not frozen and to reach the families in remote areas". This led to mobile teachers asking people who were going to that area to deliver the workbooks if they were unable to visit. Geography and weather also impacted on parental home-based education as parents tended not to change the boxes of resources as often because of the difficulty in getting to the Soum center.

For those children and families who lived in remote areas, geography also meant that those that did access the ger kindergartens had very long days because of the travelling. This resulted in some children having to stay overnight at the ger kindergarten:

> In my view Bagh (small area of district) need to have 24 hours kindergarten for 4-5 years old children at least. Because, children cannot stay in others house and school dormitory does not receive 5 years old children and sometimes they need to stay (Ger Kindergarten Manager)

Another issue that impacted on access was the mobility of the herders with groups of herders often heading of in different directions making it difficult for the mobile ger kindergartens to follow them:

> Herders move in two directions in the summer, so we cannot provide our services at the same time and children tend to lose what they have learnt. We will follow the herders who move to the left side this year and to the right side next year. Next year, ger kindergarten will go to the right 30 kilometers from soum center (Ger Kindergarten Manager).

Ger kindergartens also only took place over the summer months when the main fixed kindergarten was closed, and parents spoke about how "the sessions were not long enough" whilst practitioners stated that there was not enough time to complete the curriculum making it difficult to improve children's skills in 21 days. One regional Education Officer stated:

> Ger kindergarten runs for 21 days based on the state budget support. However, it needs to continue for 36 days because of 360 hours" program as indicated in the pre-school education regulations. First of all, we don't have sufficient budget support, and secondly, we lack teachers.

Relationships with parents

All the participants highlighted that relationships with parents were important especially in relation to the visiting teacher and parent/carer home based education program. It was stated that in relation to the home based and visiting teaching initiatives that many parents engaged well with the ECE curriculum and some of the parents spoke about how "their child must be better than me". By this the parents were referring to social mobility and that they wanted their children to have better chances in life than they had themselves. Practitioners highlighted that many of the fathers were now playing with their children and buying books as treats for their children rather than sweets. One mother said that the home-based program was "very easy, you follow the children, follow the rules, change boxes". Other mothers stated that the ger kindergartens were very helpful because "otherwise the children stayed home just watching tv and using their phone" whilst others highlighted that the ger kindergarten and children being in a safe environment helped them to get on with their day's work with their animals. This was a point brought up by practitioners who stated that ger kindergartens were important not just for "education and socializing but for caring and protection as in spring parents ignore their children (because of animal work) and very little

children stay alone without carers". Previous research has found that ger kindergartens are well-liked by parents (World Bank, 2015) for these reasons and our observations at the ger kindergartens highlighted that parents and grandparents were at ease in the ger kindergartens with many bringing food and staying to talk, over cups of tea, with other parents and teachers after the sessions had finished.

There were a few challenges raised about home-based education and some parents who had not engaged with the home-based education service felt that they "don't have time" or "were not interested" in it. One parent stated, "why should we teach our children; teachers teach not parents" with a practitioner highlighting that many were "lukewarm [to the home-based education initiative] due to the herder's busy lifestyle". Some parents also found it difficult to read books with their children because of their literacy levels; however, audio was also provided. A manager of a ger kindergarten stated in relation to the home learning program:

> We also need to think about parents' education level, they are not able to help their children because of their lack of education and literacy at the local level. For alternative learning program, the difficult thing is that parents are not always able to support their children to do homework.

However, from our observations the materials provided for the home-based education initiative and the ECE practitioner support were good and "supported parents in how to play with their children and how to ask questions of their children in a supportive and engaging way" which are all important in supporting pre-literacy. Practitioners stated that those parents who had engaged with the visiting teacher and home-based education service saw the benefit of parent led

education within the home. However, not all families engaged with this service, and preferred the ger kindergarten or no service at all. The importance of community education committees to involve the community was highlighted and, in some communities, where there were no locally based committees' teachers struggled to get the families involved.

Quality, Curriculum and Attainment

Practitioners spoke about the importance of improving the quality of the overall alternative provision program. One stated that "there are statistical data on the coverage of the alternative learning program, but, in my view, we need to pay more attention on the quality of the program instead of paying attention to increasing the enrollment rate". Teachers spoke about how the programs were important in relation to children meeting other children (ger kindergartens), improving their basic skills, and getting used to teachers so that they were school ready. However, others stated that attainment was low in many cases in the alternative provision and in some cases, it was stated that the children's attainment was lower after attending than it was at baseline. These findings replicate the World Bank (2017) report that showed significant differences in attainment between those who attend ger and fixed provision. Quality of provision is an important factor here and previous research has found that poor quality settings can have a negative impact on children's outcomes which could explain the lower attainment compared to baseline (Bernal, 2010; Naudeau et al., 2011). Moreover, evaluation of children's attainment was haphazard with some practitioners reporting full evaluations which were sent on to the regional offices for analysis and others reporting a lack of rigorous assessment of children's learning which made it difficult to evaluate outcomes.

In relation to the curriculum, practitioners discussed how teachers can choose between either implementing the national ECE curriculum or curriculums designed by a range of NGO's. This was especially the case in relation to mobile teachers and family learning programs where the NGO curriculums, for example Save the Children Japan, were designed especially to encourage parental participation in the learning activities. This was felt to be problematic by some practitioners including some of the researchers who felt that "it was better to follow the national program" so standards can be compared.

Space was identified as a constraint and alternative provision sessions were mostly undertaken indoors within the gers or home environment. It was stated that it depended on the teacher themselves whether they used the outdoor environment, and it would appear from our observations that this was not really a focus with all observed sessions taking place within the ger. With the limited space in the gers this seemed a missed opportunity given the learning opportunities that exist outdoors. However, it was also apparent that some of the practitioners did not view the outdoor space as a space for learning or the benefits of outdoor learning for young children. Moreover, the mixed age classes in the ger kindergarten, due to space constraints, were said to create difficulties in supporting individual children's learning and 'developmental needs' with a few practitioners reporting older children being disrupted by young children. However, others highlighted the advantages for the younger children in learning from the older children, but even so it was apparent that engaging mixed aged groups of children successfully was a training need for many.

Issues with the materials that were provided for the children were also raised including materials being old and in poor condition with some of the resources being incomplete because

parts were lost; and it was highlighted that there were no funds to replace these resources. Teachers, across all areas, also stated that the educational toys were very basic "such as a doll and car" and that the children found "these boring". In relation to books, two teachers pointed out that some of the books used for home-based education, including workbooks, were not relevant to the cultural heritage of nomadic children and one practitioner stated that "one of the books had traffic lights in them and the children had never seen traffic lights before, so this was confusing for them". However, another teacher stated that the children "loved learning about astronauts even though they did not know what they were". It was highlighted that more focus on nomadic lifestyles was needed especially in relation to "pictures of nomadic foods". However, observations of some of the books in the settings and all the workbooks for home-based education showed a range of topics including subjects which were highly relevant to the nomadic way of life including stories which contained pictures of gers, camels and other animals which made sense to the children's lifestyles. One fixed kindergarten manager stated that whilst "we determine skills of the 5-year-old children based on the science, we also consider our tradition and lifestyle to develop the content of the educational programs as well". This focus on Mongolian tradition is also mentioned in the Government Mid-Term Review where it is stated that "curriculum content of all education levels shall be modified to reflect patriotic thinking, respect for Mongolian culture and tradition" with a focus in pre-school education on "Mongolian language, history, culture and tradition" (Government of Mongolia, 2020: 13).

Budget/Finance

All participants spoke about how the "funding for each child is not enough" and that children could only attend one type of provision so if they had a visiting teacher, they were not

able to attend the ger kindergarten as the budget was “one child one type of provision”. Moreover, those who were not registered in the area either because they were from the unregistered mining community or lived, unofficially, with grandparents could not attend because only registered children (in that area), who were included in the budget, were allowed to attend.

Financial factors also led to issues around resources with practitioners having to photocopy books and for some settings, a reliance on parents to donate materials and food. The latter having implications for those from disadvantaged areas. These budget constraints in relation to low levels of funding for learning materials at national and regional levels were seen to directedly impact on quality. Photocopying of materials such as workbooks for visiting teachers and in the ger kindergartens was often a topic of conversation and physical workbooks were not available for all children meaning the staff also had to photo-copy them for children to have access to them. This was often at their own expense and contributed to increased workloads.

> I use my own copier machine and purchase papers from my pocket; kindergarten gives me paper once a year. Since we do not have internet access at Bagh level and cannot use online communication tools such as sending online and chat group with parents, I print out all assignments, this takes a lot of my own time and money to do (Visiting Teacher).

Lack of internet access was an issue for some of the practitioners as although all learning materials were accessible online, a lack of infrastructure in relation to technology meant that some parents and teachers could not access them. Other settings, however, were able to utilize technology and some carried out ‘tele-lessons’ online through Facebook groups which has potential in relation to overcoming some of the access issues in relation to geography and weather.

Moreover, visiting teachers often needed to rely on public transport or hire car as in many cases there was no transport provided to visit families. This was problematic in some areas as teachers were travelling over a 200k radius which resulted in teachers having to stay with the family overnight and in winter meant that the teacher was unable to get there because of a lack of suitable transport. One Pre-School Specialist stated that the "transportation cost is not included in the state budget, and we do not have the transportation budget to move the ger kindergartens either (to follow the herders)".

Capital costs in relation to the replacement of gers for the ger kindergartens were discussed and many of the practitioners across different areas spoke about broken gers or not enough gers to cover need:

> We have only a few gers now and only one ger for each Bagh. In some cases, teachers use their own ger for the program. Our ger is in a bad condition now and we cannot change ger, we do not have a building and we will ask people to use their kitchen in their house to prepare food for the children (Ger Kindergarten Manager).

For some of the provision, NGOs, such as World Vision, funded the projects and materials, but this was a short-term fix in many cases and was not necessarily something which was seen as sustainable as once the NGO funding period was over there was often no further funds. This was the case for the home-based program with 'challenges being faced to continue the program after completion of the supported program due to lack of financial resources' (Government Education Officer). The Officer continued by stating:

> For us, the most difficult thing to implementing the program are financial issues. For example, salary to the mobile teachers and the lack of professional teachers. Recently, we

discussed if we need to continue the mobile teacher's program, and ger kindergarten at the policy level. We agree on the importance of mobile teacher program as designed by Save the Children Japan and are proposing to include the mobile teacher's position in every kindergarten of every Soum in the Government Action Plan 2024. For herder children, pre-school education program is very important issue. We hope that their cost will be included in the state budget.

Discussion

Understanding the experience of practitioners is an important part of the implementation process as they offer valuable insights on how programs and policy are experienced on the ground (Metz et al., 2016). These insights, from front line staff, can potentially lead to quality improvements, increased sustainability of initiatives, and responsiveness to the needs of children and families as well as increasing learning, through iterative processes, so that policy, program design, and implementation plans can be refined.

This study identified several challenges that arose in the day-to-day implementation of policy on alternative provision for nomadic children in Mongolia. It was clear from practitioner narratives that there were issues in relation to implementation supporting structures and resources (Metz et al., 2016) which impacted on both structural and process quality (Slot et al., 2017) including adequate funding, equipment, and numbers of qualified teachers; all of which need to be in place to ensure that programs are implemented successfully. Our key informants highlighted structural quality factors related to government financing, such as a lack of resources in relation to toys, books, and workbooks as well as an inability to replace these resources when they were lost or broken. Issues around salaries and terms and conditions of staff were raised

and staff often had to pay their own accommodation and transport costs when visiting families as well as pay for photo-coping of resources and workbooks. This was said to result in low staff morale and was seen as a barrier to employing high quality early-year teachers. Moreover, previous research has shown that poorer working conditions are associated with lower quality provision (Shonkoff & Philips, 2000; De Schipper et al., 2007). The ger kindergarten buildings were also an issue and practitioners spoke about there not being enough gers to support nomadic families as well as the gers being, sometimes, in disrepair. As Mezt et al (2016) has highlighted adequate budgets are of key importance in order for initiatives to be effectively implemented and ensuring that staff are not out of pocket financially is an important consideration.

Structural indicators of quality including training and qualifications of pre-school staff, and a lack of appropriately qualified staff were identified as concerns replicating the findings of Dabla (2013). The Mid Term Review (Government of Mongolia, 2020) has highlighted a range of ways to improve on staffing levels and training including the use of distance learning for continuous professional development, more teaching assistants and improved training of staff. Although, practitioners spoke mainly about structural aspects of quality as opposed to process factors (Slot et al., 2017), they are inter-related (Vandell et al., 2010) and structural elements of quality "provide the framework for the elements of process quality to operate and to have the fullest impact on children's outcomes" (Bonetti & Brown, 2018: 5). For example, previous research has indicated that structural factors such as practitioner professional education levels and training in early years are associated with process indicators such as better teacher-child interactions and higher overall learning quality (Cryer et al., 1999; Blau, 2000).

Process factors that were focused upon by practitioners included challenges in supporting parental involvement including a lack of interest from some parents as well as issues to do with parental literacy; these were seen to impact potentially on the success of home-based learning for some parents. Whilst parental training, to improve parental interest and interactions, is mentioned in the Mid Term Review, it is important that this training includes strengths-based audio and video family literacy initiatives to support parental literacy. Moreover, it was generally stated that non-qualified staff found it difficult to engage in quality interactions with nomadic children especially when the children had not been exposed to any sort of provision before and how to engage with and extend the learning of nomadic children, specifically, needs to be the focus of additional training. This training could also potentially include topics such as how to use the outdoor space for learning and how to manage mixed-aged classes more effectively. Moreover, a pedagogical focus on the role of practitioners in extending children's imaginative play and the use of open-ended local natural resources may mitigate some of the issues that arise in relation to lack of toys and resources. The emphasis put upon structural factors by practitioners may also indicate that training is needed on process factors, as these did not generate as much discussion, this would include culturally relevant early years pedagogy and how to effectively support children's learning in low-resource settings. Furthermore, more engagement with the local community is also needed including outreach and the development of community education committees in all areas so that the local community are involved in and feel ownership of the ECE provision. This could also be an opportunity to highlight the advantages of the home-based education provision and increase parental interest in alternative provision.

Our research replicates the findings of the World Bank (2017) with practitioners stating that that the short duration of ger kindergartens often results in many children not meeting their

learning goals. The policy of 'one child one type of provision' as well as the policy on only registered children being able to access provision needs further critical policy exploration as implementation success depends on appropriate and effective policy and program design. Excluding unregistered children who may be the most vulnerable and hence more likely to benefit from ECE provision will hinder policy aspirations of improving access for all children. Whilst the 'one child one type of provision' policy results in a lack of equity between the time children spend in ger kindergartens and the time spent in fixed provision. This is important as previous research has found that increased participation in ECE programs is associated with better learning outcomes (American Institutes for Research, 2013; Bernal & Fernández, 2013; Nakajima et al., 2016) although some research has found that for those who have less participation the quality of the provision is key (Brinkman et al., 2015). One possible solution to the duration issues, we suggest, is that children who attend ger kindergartens over the summer, which are valued by some parents and enable children to engage with other children, may also need to have access to home based and visiting teacher initiatives outside the times that ger kindergartens run. This would overcome some of the equity issues in relation to the short duration of ger kindergarten provision and would potentially improve the outcomes of these children. This, of course, has financial implications and may also require the home-based initiative to be offered to children under the age of 5 years. Alternatively, increasing the amount of time at ger kindergartens may also be an option but again staffing and financial issues may be a challenge. Mobile technology also offers potential, and Mongolia already has experience of this in relation to M-Health initiatives around primary health care for nomadic peoples (Morgan & Sengedorj, 2022). The use of Facebook groups for online discussions with children and remote learning opportunities were utilized by some of the participants in this study and could improve access to children during the winter

months when visiting teachers were unable to travel. Furthermore, mobile phones offer the opportunity to support parents through phone-based coaching and guidance and it is estimated that approximately 90% of Mongolian herders have access to a mobile phone (Arjjumend, 2018). The impact of mobile technology on access to early years provision for nomadic peoples would benefit from more research on how this could be achieved. More evidence is also required, using well planned randomized controlled trials, on the cost-benefits of each type of provision and it may be that as well as comparing ger kindergartens, visiting teaching and home-based education independently, a hybrid model is also compared consisting of ger kindergartens with home-based education or the use of mobile technology so that the provision is year-round to mirror that of fixed kindergartens. As UNICEF (2019) states, the most disadvantaged children should be the focus of equitable early childhood education, and this means that their needs should not be secondary to mainstream provision nor dependent upon the timetables of fixed kindergartens.

This research has relevance to ECE provision for other groups of nomadic peoples for example, Gypsies and Travellers in the United Kingdom and Republic of Ireland who have 'often traditionally chosen to home educate' (Bhopal & Meyers, 2016: 6) and have low attendance in formal ECE provision (Department of Education, 2021). The provision of home-based culturally relevant ECE workbooks, videos, and materials for Gypsy and Traveller communities, designed in collaboration with communities, may offer opportunities here and overcome the poorer outcomes in education for these groups (Brassington, 2022). This home-based ECE provision could be attached to Children's Centers and include visiting teachers and outreach to build up trust and relationships with the communities. Moreover, in relation to other nomadic groups, ger kindergartens offer an example of community-based provision which is flexible and can follow the migratory paths of these communities. Examples of this type of provision are already evident

in relation to health services such as the Ng'adakarin Bamocha health projects which provide mobile health services to the Turkana in Kenya. Mongolia, therefore, offers much potential learning in relation to policy and implementation on how early years programs can be provided to nomadic peoples.

This study has some limitations. First, this study took part in 3 Aimags in Mongolia and the independent municipality of Ulaanbaatar (capital city). There are 21 Aimags in Mongolia and hence this study cannot be extrapolated to reflect views of practitioners in other areas. However, informants from NGO's and from the Ministry of Education who had an overview of the whole of ECE provision for nomadic children across Mongolia were also interviewed. Second, more interviews with parents and children would have added to the richness of data and will be the focus of upcoming research in this area. Third, COVID-19 resulted in the final interviews being undertaken online and thus the researchers missed valuable opportunities to observe practice in these kindergartens.

Conclusions

Mongolia is often held up as an example of a country that has identified a number of "creative solutions" to the issue of providing ECE services to nomadic children. Indeed, mobile ger kindergartens, visiting teachers and parent/family led education are innovative ways in which to offer ECE to young children and Mongolia's commitment to ensuring ECE provision for nomadic children is evident. To our knowledge this is the first study which has primarily explored the perspectives of early years practitioners on how alternative provision for nomadic children has been implemented in Mongolia. What is apparent from our findings is that funding, especially in relation to sustainability, teacher terms and conditions, and the day to day running

of the programs including transportation costs, is a major issue which impacts on progress and that necessary investments in alternative provision for nomadic children is needed if Mongolia is to meet its Vision of ensuring that all children have access to quality ECE provision. This is not only a challenge for Mongolia but for many countries and a global review concluded that "programs for early childhood development everywhere are challenged by inadequate and uncertain funding" (Richter et al., 2016: 103). Moreover, ensuring access to ECE provision is often prioritized over quality of provision, resulting in children accessing provision which is poorly staffed or staffed by unqualified practitioners which does not meet the needs of children. More focus on process aspects of quality in the design of programs are of importance and should include training on how staff can effectively support nomadic children's learning in lower-resource settings using contemporary and culturally relevant pedagogical research and practice. Lastly, equity between nomadic and non-nomadic children, in relation to the duration of provision, needs further attention and a re-evaluation of the policy of 'one child one type of provision' is needed. This is important to ensure that alternative ECE for nomadic peoples does not come second to those of the mainstream urban populations.

References

American Institutes for Research. (2013). *Getting ready for school: a child-to-child approach. Program evaluation report*. Retrieved from http://www.childtochild.org.uk/wpcontent/uploads/2014/07/AIR-Report-of-Child-to-Child-Pilot-Findings_June_- 2013_A4.pdf

Anderson, J.E. (1975). *Public Policymaking: An Introduction*. Boston: Houghton Mifflin.

Arjjumend, H. (2018). Review of Pastoralists' Resilience and Adaptation to Climate Change: Can Technology Help Pastoralists Mitigate The Risks? . *International Journal of Bio-resource and Stress Management*, 9(1), 118-128. https://doi.org/10.23910/ijbsm/2018.9.1.1833a

Batkhuyag, B., & Dondogdulam,T. (2018). Mongolia Case Study – The Evolving Education Needs and Realities of Nomads and Pastoralists. Background paper prepared for the 2019 Global Education Monitoring Report: *Migration, displacement, and education: Building bridges, not walls.* Paris: UNESCO.

Bernal, R. (2010). *The impact of a technical training program for childcare providers on children's wellbeing.* Documentos CEDE. Bogotá: Universidad de los Andes.

Bernal, R., & Fernández, C. (2013). Subsidized childcare and child development in Colombia: Effects of hogares comunitarios de bienestar as a function of timing and length of exposure. *Social Science and Medicine*, 97, 241–249. doi:10.1016/j.socscimed.2012.10.029

Bhopal, K., & Myers, M. (2016). Marginal groups in marginal times: Gypsy and Traveller parents and home education in England, UK. *British Educational Research Journal*, *42*(1), 5-20. https://doi.org/10.1002/berj.3198

Bonetti, S., & Brown, K. (2018). *Structural Elements of Quality Early Years Provision: A Review of the Evidence.* London: Education Policy Institute.

Brassington, L., (2022). *Gypsies, Roma, and Travellers: The ethnic minorities most excluded from UK education.* HEPI Report 151. Oxford: Higher Education Policy Institute/University of Sussex

Brinkman, S. A., Hasan, A., Jung, H., Kinnell, A., Nakajima, N., & Pradhan, M. (2016*). The role of preschool quality in promoting child development: evidence from rural Indonesia*. *Washington D.C.:* The World Bank.

Britto, P., Yoshikawa, H., & Boller, K. (2011). Quality of early childhood development programs and policies in global contexts: Rationale for investment, conceptual framework, and implications for equity. *Social Policy Reports of the Society for Research in Child Development*, *25*, 2, 1-31.

Britto, P. R., Lye, S. J., Proulx, K., Yousafzai, A. K., Matthews, S. G., Vaivada, T., & Bhutta, Z. A. (2016). Nurturing Care: Promoting Early Childhood Development. *The Lancet 389,* 10064, 91–102.

Bryman, A. (2012). *Social Research Methods*. Oxford: Oxford University Press.

Dabla.A., (2013). *Improving Primary Education Outcomes for the most Vulnerable Children in Mongolia Project:* Baseline Survey Report (June 2012 –2016). Ulaanbaatar: Save the Children Japan in Mongolia.

Denboba. A. D., Elder. L. K., Lombardi. J., Rawlings.L. B., Sayre. R. Kraft., & Wodon. Q. T. (2014). *Stepping up early childhood development: investing in young children for high returns* (English). Washington, D.C: World Bank Group.

Department for Education. (2021). 'Development Goals for 4-to-5-year-olds. https://www.ethnicity-facts-figures.service.gov.uk/education-skills-and-training/early-years/attainment-of-development-goals-by-children-aged-4-to-5-years/latest

De Schipper, E. J., Riksen-Walraven, M. J. & Geurts, S. A. (2007). Multiple determinants of caregiver behavior in childcare centers. *Early Childhood Research Quarterly*, Vol. 22, pp, 312-326.

Dowd, A., Friedlander, E., Jonason, C. Leer, J., Sorensen, L. Z., Guajardo,J., & Pisani. L. (2017). Lifewide Learning for Early Reading Development. *New Directions for Child and Adolescent Development, 155*, 31–49.

Dowd, A., Friedlander, E., and Guajardo, J. (2014). Opportunity to Learn (OTL): A Framework for Supporting Learning? In N. V. Varghese (Ed.), *From Schooling to Learning* (pp. 95-107*).* Paris: UNESCO.

Dyer, C. (2014). *Learning and Livelihoods: Education for All and the marginalisation of mobile pastoralists.* London: Routledge.

ETF (European Training Foundation). (2013). *Torino Process: a policy analysis approach to supporting policymaking through policy learning*. Turin: ETF.

FAO. (2016). *Guidelines for the Enumeration of Nomadic and Semi-Nomadic (Transhumant) Livestock*. Rome: FAO.

Fernald, L. C., Kariger, P., Engle, P., and Raikes, A. (2009). *Examining Early Child Development in Low-Income Countries: A Toolkit for the Assessment of Children in the First Five Years of Life*. Washington, DC: World Bank.

Fixsen, D. L., & Blase, K. A. (1993). Creating new realities: Program development and dissemination. *Journal of Applied Behavior Analysis*, 26, 597-615.

Fixsen, D. L., Blase, K. A., Timbers, G. D., & Wolf, M. M. (2001). In search of program implementation: 792 replications of the Teaching-Family Model. In Bernfeld, G.A., Farrington, D.P., & Leschied, A.W. (Eds.), *Offender rehabilitation in practice: Implementing and evaluating effective programs* (pp. 149-166). London: Wiley.

Fixsen D. L., Naoom S. F., Blase K. A., Friedman R. M., & Wallace F. (2005). *Implementation research: A synthesis of literature (FMHI #231)*. Tampa, FL: University of South Florida, Louis de la Parte Florida Mental Health Institute, The National Implementation Research Network.

Frank, R.P., & Schroeder, J., (2013). Implementation Science: What Do We Know and Where Do We Go from Here? In Halle, T., Metz, A., & Martinez-Beck, I (Eds). *Applying Implementation Science in Early Childhood Programs and Systems (*pp. 5-19). Baltimore: Brookes Publishing.

Gardelle, L., & Zhao, Z. (2019). Being a herder in contemporary Mongolia: Nomadic identity and nationhood building at school. *Asian Ethnicity*, *20*, 3, 364-385.

Government of Mongolia. (2016). *Mongolia Sustainable Development Vision 2030.* Mongolia: Government of Mongolia.

Government of Mongolia. (2020). *Education Sector Mid-Term Development Plan 2021-2030*. Mongolia: Government of Mongolia.

Heckman, J. J., and Masterov, D. V. (2007). The Productivity Argument for Investing in Young Children. *Applied Economic Perspectives and Policy 29*, 3, 446–493.

Jackson, K., and Bazeley, P., (2019). *Qualitative Data Analysis with NVivo*. London: Sage

Lynch, R.G. (2005). *Early Childhood Investments Yield Big Payoff. Policy Perspectives.* San Francisco, CA: WestEd.

MECSS, Educational Institute, & UNESCO. (2019). *Report on Mongolia Educational Base.* Ulaanbaatar: MECSS.

Metz, A., Halle, T., Bartley, L., & Blasberg, A. (2016). The Key Components of Successful Implementation. In Halle, T., Metz, A., & Martinez-Beck, I (Eds). *Applying Implementation Science in Early Childhood Programs and Systems*. (pp. 21-42) Baltimore: Brookes Publishing.

Mitter, R., and Putcha, V. (2018). *Strengthening and Supporting the Early Childhood Workforce: Training and Professional Development.* Washington DC: Results for Development.

Modica, S., Ajmera, M., & Dunning, V. (2010). Culturally Adapted Models of Early Childhood Education. *YC: Young Children 65*, 6, 20-26.

Morgan, J. & Sengedorj, T, (2022). Nomadic Peoples and Access to Healthcare. La Placa, V & Morgan, J., *Global Public Health: Policy, Practice and Theory*. (pp.149-157) London: Routledge

Nakajima, N., Hasan, A., Jung, H., Brinkman, S., Pradhan, M., & Kinnell, A. (2016). *Investing in school readiness: An analysis of the cost-effectiveness of early childhood education pathways in rural Indonesia*. Washington D.C.: The World Bank

Naudeau, S., Martínez, S., Premand, P., & Filmer, D. (2011). *Cognitive Development among Young Children in Low-Income Countries. In No Small Matter: The Impact of Poverty, Shocks, and Human Capital Investments in Early Childhood Development*. Washington, DC: Harold Alderman, The World Bank.

Neuman, M. J., Josephson, K., & Chua, P.G. (2015). *A Review of the Literature: Early Childhood Care and Education (ECCE) Personnel in Low- and Middle-Income Countries*. Early Childhood Care and Education Working Paper Series 4. Paris: UNESCO.

Ng"asike, J. T. (2014). African early childhood development curriculum and pedagogy for Turkana nomadic pastoralist communities of Kenya. *New Directions for Child and Adolescent Development, 146,* 43–60.

OECD. (2018). *Engaging Young Children: Lessons from Research about Quality in Early Childhood Education and Care, Starting Strong*. Paris: OECD.

Rao, N., Sun, J., Wong, J.M.S., Weekes, B., Ip, P., Shaeffer, S., & Lee, D. (2014). *Early Childhood Development and Cognitive Development in Developing Countries: A Rigorous Literature Review.* London: Department for International Development.

Richter, L. M., Daelmans, B., Lombardi, J., Heymann, J., Boo, F.L., Behrman, J.R., Lu, C. et al. (2016). Investing in the Foundation of Sustainable Development: Pathways to Scale up for Early Childhood Development. *Lancet 389,* 103–118.

Shonkoff, J. P. & Phillips, D. A. (2000). *From Neurons to Neighborhoods: The Science of Early Childhood Development,* National Academy Press, Washington DC

Silverman, D. (2010). *Doing Qualitative Research: A Practical Handbook*. London: Sage.

Slot, P. (2017). *Literature review on Early Childhood Education and Care quality: Relations between structural characteristics at different levels and process quality, Internal document*. Paris: OECD.

Spier, E., Leenknecht, F., Carson, K., Bichay, K., & Faria, A.M. (2019). Tipping the scales: overcoming obstacles to support school readiness for all in low- and middle-income countries. *Early Years, 39*, 3, 229-242.

Tserendorj, E. (2017). *Improving Primary Education Outcomes for the most Vulnerable Children in Rural Mongolia Project. End of Project Evaluation Report*. Mongolia: Save the Children Japan.

UNICEF. (2019). *A World Ready to Learn: Prioritizing quality early childhood education.* New York: UNICEF.

UNICEF. (2014). *Analysis of the Situation of Children in Mongolia.* New York: UNICEF.

Vandell, D. L., Belsky, J., Burchinal, M., Steinberg, L., & Vandergrift, N. (2010). Do effects of early childcare extend to age 15 years? Results from the NICHD study of early childcare and youth development, *Child Development, 81*, 3, 737-756.

Vargas-Barón, E. (2015). Policies on Early Childhood Care and Education: Their Evolution and Some Impacts. Paper commissioned for the *EFA Global Monitoring Report 2015, Education for All 2000–2015: achievements and challenges*. Paris: UNESCO.

Woodhead, M., Ames, P., Vennam, U., Abebe, W., & Streuli. N. (2009). *Equity and Quality? Challenges for Early Childhood and Primary Education in Ethiopia, India, and Peru*. The Hague, Netherlands: Bernard van Leer Foundation.

World Bank. (2015). *Implementation completion and results Report (TF-11836) on a global partnership for education fund grant to Mongolia for an early childhood education project*. Washington, D.C.: World Bank Group.

World Bank. (2017). *Pre-primary education in Mongolia: access, quality of service delivery, & child development outcomes*. Washington, D.C.: World Bank Group.