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16. Social Media and the Use of Technology in Home Language Maintenance

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1. Introduction

The ubiquity of technology has led to the re-classification and expansion of many terms used in the context of family and language research. Marsh et al. (2017), for example, propose an expansion of the term "family literacy", first coined by Taylor (1983), ensuring that digital practices inherent in modern family life are more explicitly included in research and policy. A thus expanded notion of "family digital literacy" is then distinct from the notions used in the existing research in the field of digital literacy, with the former providing a specific focus on family digital practices, while the latter is more closely related to skills development linked to digital practices, both internal and external to the family context.

Within the realm of multilingual families, the notion of family language policy (Lanza and Lomeu Gomes and Palviainen, both this volume) may require a similar "digital" addendum, taking into account recent technological developments in the family context.

With uptake and availability of technology still continuing to rise, social understandings of family language, with respect to policies and education, need to consider family language policy from a technological perspective: what media are accessed within the family, specifically by the children, and how access is actioned within the family setting. Further questions need to be asked, such as: to what extent does the availability of media and the ability to access and navigate them influence the child's attitude and use of the home language? In contemporary families, technology facilitates a significant proportion of daily language input, especially as children grow older. It is therefore of vital importance to critically explore and understand both the affordances and barriers technology puts in place, specifically for multilingual families. This chapter explores the use of technology and social media in multilingual families, particularly those with younger children of primary school age. The focus is first on a detailed exploration of motivational factors of technology, and how these may be utilised for home language development (section 2), before it shifts to how the language of social media and popular culture may influence children's sense of belonging (section 3). The research literature around screen time is then critically evaluated

(section 4), before this chapter looks at the affordances of specific technologies in relation to home language maintenance (sections 5 and 6). The difference between consumption of, and participation in, media is discussed in section 7, while the role of parents as gatekeepers is outlined in section 8. Finally, the chapter offers conclusions on how technology may become more integrated into family digital practices, supporting home language development through parent-child collaboration (section 9).

2. Motivational aspects of technology

Understanding how multilingual children view themselves both as individuals and within their family, school, and social context, is an important consideration when seeking to understand multilingual identities (Little 2017a). Technology forms a significant part of our lives, and the way we access, use, and relate to technology forms an important aspect of our sense of self. Operating on the principles of autonomy, competence, and relatedness, self-determination theory (Ryan and Deci 2008) seeks to understand motivational factors that may influence behaviour. Borrowing from the notion of self-determination theory and curated identity, or the notion of how we choose to display ourselves online (Potter 2012), we can conclude that our lives online are as much part of our identity as our lives offline. Among multilingual children, this "determination of the self" is arguably more complex, balancing composite identities (Tseng, this volume) which have emotional links to the children's and the parents' heritage, thus necessitating a careful examination of the place that multiple languages have in the children's life, and – in the context of this chapter – how technology relates to this.

The increase in technology over recent years undoubtedly means increased access for children to a large variety of both suitable and unsuitable online experiences (Blackwell et al. 2014). However, the links between technology and motivation require critical consideration. Early on in the literature around motivation and online environments, Katz (2002) suggested that there might be a "'psychological suitability" for the medium, particularly among those

> who held attitudes such as positive self-image, independence in the learning process, self-confidence in the learning process, satisfaction with learning, internal locus of control, level of control of learning, creativity, and motivation for study (p. 5).

This was among the first publications highlighting the notion of an inherently motivational pull of technology, at a time when many still saw the medium as being particularly suitable to work with disaffected learners (see e.g. Franklin 2001). In a study on the relationship between the motivation to engage in online games and the motivation to engage with the home language (Little 2019a), background information provided by 212 participating families showed that 82% of children had a generic interest in online or mobile games, and an encouraging 78% of the families declared that children were, in principle, interested in the home language. These figures, and the resulting overlap amongst the two groups, highlight the potential affordances of the medium specifically within the home language context, although the dichotomy of children as language learners versus children as game players needs to be further explored (Little 2019a). Whitton (2013), for example, points out that the enjoyment of playing games does not necessarily correlate with the motivation to engage in games-based learning, and that online games and access to technology raise complex tensions around equity and social inclusion. Just because a child likes playing 'Fortnite' (an online multi-player game which rewards strategy and collaboration) does not mean that the same child will happily engage with a points-based vocabulary test, or a kanji writing app, and we need to be careful not to oversimplify children's interests, and instead as agents capable of expressing their own digital preferences (Smith-Christmas, this volume).

At the same time, this distinction between different types of games does not necessarily mean that there will be a clearly designated split between engagement for entertainment and engagement for language learning. In fact, Kalantzis and Cope (2012) discuss ubiquitous learning among the current generation of children, whose learning, thanks to technological access and multiliteracies, is not confined to the classroom or even to the family context, but may instead take place at any time, through a variety of media, both formally and informally. With many opportunities for online language engagement, then, it becomes ever more important to understand the complexities facing multilingual families, seeking to develop a holistic approach to online technology and social media, which has the potential to embrace and support all family languages.

Looking at these complexities more closely, there are several important considerations linked to expertise, knowledge, and power: while children may be comfortable in the world of social media and online technologies, younger children in particular may not necessarily have either the language skills or the ability to navigate resources in the home language. Similarly, fully grasping financial implications of online resources – which ones need payment, which ones need subscriptions, which ones are free, and which ones have hidden costs – may be difficult for children and/or parents. Parents and children may also have very different views on the kinds of games and apps that they find motivating, desirable, or useful, leading to inter-family tensions. As a result, parents may prioritise "edutainment" games aimed at language learning (Little 2019a). These games are often thinly veiled learning apps, focusing on vocabulary learning or developing literacy skills. On the other hand, games which have been designed purely for game play have been shown to include up to 36 different types of learning opportunities, including semiotics, situated meaning, cultural models, and textual and intertextual understanding (Gee 2004). As such, they have the potential to support several forms of action-based language acquisition (Glenberg and Gallese 2012). Nevertheless, they are often viewed by parents as secondary or negative, and disregarded in favour of more obvious educational games, which may hold little appeal for the children.

It is rare to find custom-made environments specifically for children who have little confidence in their home language, and those that do exist are often tied to specific funding streams (e.g. research grants) which make it difficult to maintain and update resources. Edwards et al. (2002) report on an interface enabling children independently, or families collaboratively, to create their own books in a minority language, while Eisenchlas, Schalley and Moyes (2016) explore the affordances of three custom-designed games played by nine children from German home language backgrounds, reporting improvement in motivation to engage with the home language, as well as advanced literacy development. While the resources created for these studies are successful, they lack the funds to make them commercially viable, and thus they often become unavailable once research funding finishes. Looking at the commercial market, and being able to navigate it successfully, therefore becomes a vital component in the search for sustainable and engaging opportunities for language use.

Smith-Christmas (2018) explores how playful language engagement on the child's terms can help with the affective aspects of home language management, assisting children in forming positive associations with the language, and ultimately transferring these associations to attitudes and language use. Understanding the children's world view here is a vital enabler for a positive motivational relationship between the child and the home language, and facilitating the child to lead their own gaming explorations according to preference can have vital motivational impact in terms of language engagement, even if language learning in and of itself is not a core function of the game or app in question. A sense of identity and belonging can be an important factor in children's digital practices, making this a relevant focus for the following section.

3. Social media and popular culture as belonging

Among children, access to social media and technology fulfils not only the role of entertainment, but also has important social connotations, allowing them to access playground conversations, and feeling a sense of belonging among their peers (Gonzalez 2005; Gonzalez, Moll, and Amanti 2005). These social interactions form an important part of identity construction, a way of negotiating the self as part of social participation (Lave and Wenger 1992). Even in the early years, this identity construction and social participation is influenced by media, as popular culture informs children's conversations and play (Arthur 2001; Marsh 2005), and children frequently access a variety of media on the basis of their interests (Marsh 2009). Among multilingual families, this can lead to a split between two language selves (Orellana 1994), where one self fits in with that of peers and the majority language speakers, whereas another is relegated to the family home. Understanding how multilingual children negotiate their various interests and languages within a multimedia context is therefore an important step in facilitating language development, as well as identity construction. While Potter (2012) discusses the notion of a curated identity in terms of how and what we choose to share online, this notion can helpfully be extended by seeking to understand how children's multilingual, multimedia experiences, sometimes curated by parents, sometimes incidentally or formally introduced in educational settings, can have an impact on identity construction.

One aspect of the construction of a multilingual identity is an understanding of the cultural and social capital (Bourdieu 1986) children gain in their multilingual lives. Similar to the notion of funds of knowledge (Gonzalez 2005; Gonzalez, Moll, and Amanti 2005), Ashton (2005) warns that cultural capital which does not conform to the norms of the dominant society may potentially be seen as having little value in that society. While her argument is presented as a call to include more popular culture in formal literacy contexts, it throws light on the complexities experienced by multilingual families, whose cultural experiences – both online and offline – may involve multiple cultural references ranging from *babushkas* to Bollywood. For children, these experiences may provide cultural capital within the home context, but may not necessarily offer much to enhance their social standing in the playground. While parents may rightly argue that engagement with the home language is not meant to improve social standing in the playground, it is nevertheless important to seek to understand children's lives from their perspective. Although Ashton (2005) concludes that

> using popular culture to build on children's existing capital gives children of all social and economic strata, racial and language groups the currency needed for full participation with their peers and in academic pursuits (p. 38),

this conclusion implies that all popular culture is universally popular, foregrounding anglophone Western cultural capital and treating popular culture as a singular concept, rather than as relevant to and popular among very different populations. But even in shared popular culture, language can make a difference, with key vocabulary being different from that of peers and preventing access to a fund of knowledge that is shared among peers. For children inhabiting multiple "cultural niches" (Boyd, Richerson, and Henrich 2011), this inhabitation of multiple cultural and social spheres requires continual maintenance and effort, potentially involving a multiple workload, such as learning the names of all Pokémon in multiple languages, or learning multiple names of Harry Potter creatures or spells. While this, of course, also has multiple benefits, and maximises development of their social capital, not all children view the effort as worthwhile (Little 2019b).

The previous sections discussed access, motivation, and negotiating multiple or composite identities in different social spheres; however, screen time remains the single

most constant concern raised by parents (Little 2019a), thus warranting a dedicated section in this chapter, highlighting key literature, and juxtaposing opposing views and ideals among families.

4. Screen time

What kind of technology children should access, via what media, and how long they should spend in front of this technology has caused much debate. While some view screen time as a distraction from learning, others argue for media supporting learning, facilitating both language and literacy development (Robinson and Mackey 2003). Wright et al. (2001), for example, point to the benefits of educational content for children; however, little is known about the viewing habits of multilingual children, where arguably accessing media in the home language can be said to have educational potential, regardless of educational content, by increasing exposure and access. Similar to the previous problematisation of motivation to play versus motivation to learn, in a multilingual context, we therefore need to re-define existing classifications, and consider carefully what potential technology has for home language development.

One recurring issue is that screen time is frequently used as a singular term, while it actually incorporates a large number of potential interactions with media, both active and passive, and the term ”screen” being used synonymously with many different types of screen, without critically exploring context or use. Today, screens are used in many multifaceted contexts, with increasing opportunities to mix online and real-world engagement. Some games, such as Pokémon Go, for example, are mainly played outside, by walking around, and several television programmes encourage physical activity. Leblanc et al. (2015) point out that this mis-association works in two ways – not only is screen time seen as passive, but sedentary time outside of school is typically viewed as mainly screen time, when screens actually account for only one third of overall sedentary time, which also includes eating, passive transport, and reading a book. With many studies around screen time among children focusing on obesity (see e.g. Leblanc et al. 2015) and sleep patterns (see e.g. Tzischinsky and Haimov 2017), a more nuanced understanding is required when we consider what devices children use, what they access, the reasons they access it, and other situational details. Only recently have governmental recommendations in the United States

begun to take the context and content of screen engagement into account (American Academy of Pediatrics Council on Communications and Media (AAP) 2016). What is important here is to consider the correlation/causation complexities – the American Academy of Pediatrics Council on Communications and Media (2016) finds, for example, that any speech delays among children who use screens excessively are likely due to decreased parent-child interaction. This finding, then, draws into sharp focus how technology and social media may be used constructively, socially, and collaboratively, making it part of targeted parent-child interaction, rather than a solitary, passive pursuit.

Cultural differences linked to screen time have been reviewed in terms of both how sedentary habits may differ across countries (see e.g. Leblanc et al. 2015) and how parental education and socio-economic background may affect access (see e.g. Atkin et al. 2014), but there has been little research into how cultural attitudes affect children's use of technology. Tzischinsky and Haimov (2017) explore the viewing habits and sleep patterns of Muslim and Jewish children in Israel and discovered that Muslim children in the study had longer viewing habits, earlier sleep times, and more sleep disturbances than their Jewish counterparts. However, as a quantitative study, the reasons for this could only be hypothesised, and require further critical exploration before arriving at generalised conclusions based on language or cultural differences.

In exploring children's use of screen time, then, it is important to differentiate between various uses but also the potential it has to facilitate greater language development. In particular, this chapter focuses not on providing one-size-fits all answers to the issue of screen time, instead suggesting facilitatory, collaborative and family-oriented contexts for parents and children to explore issues together, and arrive at personalised solutions. In the following, this chapter explores screen time from the perspectives of accessing films or programmes, engaging with games and apps, and participating in online social media practices, in each case exploring the specific affordances linked to multilingual families.

5. Television, films, DVDs, streamed television, YouTube and co.

As outlined above, the definition of screen time is becoming ever more complex, and nowhere is this more evident than in the context of watching filmed content. While there used to be three or four channels at a family's disposal, there is now almost unlimited

potential to access filmed materials, free and paid-for, in real-time or on-demand, created by professionals or amateurs at a variety of levels, with several media bridging the gap between consumption and engagement both online and offline. Several programmes (including children's programmes) offer opportunities for interaction, through discussion boards, or posting images of work created by viewers of the programme. This blurring of consumption versus engagement makes it difficult to discuss some aspects of technology use without also discussing others.

In a study conducted among bilingually educated pupils in Melbourne, Australia, Molineux and Aliani (2012) found that TV and DVD watching at home was seen as the most common bilingual practice among students in two of the three schools under investigation. However, a repeated study today may shift these results to online practices, especially with the rapid development of streaming and online content. A differentiation according to devices may therefore not be the most helpful, instead, a focus on the type of medium (i.e. filmed content) may be more appropriate. In this respect, filmed content remains widely accessible, enabling multilingual children to access content in their multiple languages, which may ultimately help with at least passive language development. One study explicitly explored and compared TV watching habits in both English and the home language (Curdt-Christiansen and La Morgia 2018). Working with families with Italian, Chinese and Pakistani backgrounds, they identified varying practices in terms of both English and home language TV watching. Half of the Italian families provided home language programmes for children (14 out of 28), while the number was much smaller among the participating Chinese families (4 out of 28), and non-existent among Pakistani families (0 out of 10). While some of this may be due to availability, at least some of the viewing habits are attitudinal, since all languages are represented in some form or another on online streaming platforms. Curdt-Christiansen and La Morgia suggest that Urdu may have a diminished function in family life, since families were often second or third-generation immigrants. However, it is often exactly these families that are actively making efforts to keep the home language alive (Little 2017b). Such differences show how difficult it is to identify a one-size-fits-all approach for multilingual contexts, which may be one reason why related studies tend to be small size and qualitative, focusing on individual families rather than larger groups (Juvonen et al. This volume).

In one such study, located in a bilingual context in the United States, Orellana (1994) explores young children's language choices in relation to their viewing habits. The data showed that children switched to English when engaging in play about superheroes, since their experience with relevant media (superhero films, comic books, etc.) were English dominant, while they were playing in Spanish at other times. Orellana's findings link TV viewing habits to both funds of knowledge (Gonzalez 2005; Gonzalez, Moll, and Amanti 2005) and real-life play (Marsh 2005), again highlighting the complexities families face when wanting to facilitate both their children's language and social development. This link between viewing and real-life play and engagement is important, because it highlights just one of many opportunities for language use. Real-life play further encourages physical action, linked to improved language acquisition (Glenberg and Gallese 2012; Adams, Glenberg and Restrepo 2018), and challenges the perception of screen time as a purely passive phenomenon. Understanding the links between the language children use to access content, and the language children use to discuss content in their various social spheres is a vital consideration for parents, especially since they may be the only people in the child's life to offer opportunities to discuss and engage with viewing content in the home language. Co-viewing and considering activities that link viewing habits to real life situations can create occasions for family communication, bringing content to life, and bridging passive and active domains. For older children, creating as well as consuming video content may be an option, something that is further explored in section 7 which focuses on social media.

6. Games and apps

The use of games and apps in multilingual families is among the least explored when it comes to examining the affordances of different resources for language development. While there is a considerable market of games and apps, accessing them can be problematic for financial as well as technological reasons. Many parents are reluctant to provide access to computer games for younger children (Hamilton et al. 2016), making the medium mainly relevant for children of primary school age and upwards. Yet again, however, the literature remains dominated by studies in the contexts of English as an Additional Language and foreign language learning, often focusing specifically on learning outcomes. One example is presented by Ashraf, Motlagh, and Salami (2014), who evaluate the impact of online vocabulary games on language learners' vocabulary retention in Iran, reporting positive

results, a finding echoed by Sundqvist and Wikström's (2015) research among teenagers in Sweden, involved in digital gameplay. These studies are useful in showing the learning potential of games and apps, but do not necessarily address previously outlined issues concerning asynchronous language development among home language learners. The difficulty in developing a solid research base in the home language context is similar to the difficulties faced by developers who might consider catering to this specific niche: since each multilingual family is a microcosm that is unique in its language composition, family composition, family language policy and choices, there is simply no homogenous market that would make it viable for games developers to cater for the specific needs of all multilingual families (Little 2019a). Therefore, the best way forward for multilingual families is to develop an awareness of available apps and games, and to consider whether, where and how these may fit into family life.

Games may exist at a number of levels: commonly available games that have been localised/translated into multiple languages, games aimed at language learners of the home language (e.g. foreign language learners), games aimed at young native speakers looking to develop early literacy (early years market), and games which originate in the country the language is spoken, specific to the local market. Each has their own shortcomings and benefits. The easiest games to access, and arguably most likely to fit in with a child's fund of knowledge (Gonzalez 2005; Gonzalez, Moll, and Amanti 2005), are games that are translated into multiple languages. These translations, however, depend on marketability, and will only exist in languages where it makes financial sense to localise the game. Similarly, translations that only take into account language, rather than a sensitive cultural localisation, may be inappropriate in many contexts. Games aimed at foreign language learners are often gamified learning apps, consisting largely of vocabulary lists which are learnt in a number of playful settings, but which rarely offer a true gameplay experience. Games aimed at young learners for literacy development may be suitable if the home language speaker is young, but can create tensions with children's sense of identity if they feel the content and visuals are too childish for them (Little, 2018). Finally, games which are aimed at native speakers may arguably offer the best potential gameplay, in the most natural setting, but the language may be inaccessible to less confident speakers, especially because a number of games require high literacy skills.

Finding appropriate games and deciding which may be a good fit for any particular child can thus be problematic – parents may need to browse suitable websites in the home language to identify suitable games, and then, in some cases, navigate complex settings to enable access. Again, the home language may greatly limit the choice and availability, but parents choosing to jointly access and discuss resources with their children (AAP 2016) will not only widen the range of resources accessible to them, but also be able to model language use and monitor their child's gaming habits simultaneously. Through co-playing, children who are less confident in the language can therefore access more complex, and potentially more engaging, resources, creating not only opportunities for more advanced language use, but, again, facilitate a bridge between online and offline engagement, since parents will be familiar with content and rules, and thus able to converse with children about aspects important to them.

7. Online/social media consumption and participation

As outlined previously, there is an increasing overlap between consumption of media (whether viewing filmed content or playing games and apps), and online participation, since many programmes, films, and games offer social interaction opportunities via the Internet. The use of social media thus potentially encroaches on all virtual media use, and essentially represents any and all opportunities to use media to take part in online activities. This may range from commenting on video content, communicating via social media platforms, and actively creating content for others to consume and engage with. Although English has long been viewed as the lingua franca of the Internet (Crystal 2003), it has been in steady decline, from 75% of all Internet pages in 1998, to 45% in 2009 (Pimienta, Prado and Blanco 2009). By 2018, it had become impossible to analyse the Internet as a whole, and although English accounts for 54% of the 100 million most accessed websites in 2019 (W3Techs 2019), this only serves to problematise the attempts to linguistically homogenise a medium that is both fast-evolving and flexible. With the Internet becoming more multilingual, opportunities for multilingual families are also on the rise.

In fact, language use and prevalence of languages online are becoming ever more complex (Kern 2014), incorporating truncated and stylised language, both spoken and written, as well as multiple versions of language mash-ups. Accessed content may be

generated by native speakers or non-native speakers, in a multitude of genres and for multiple purposes, including dialects and language variants. These can be a useful opportunity to expose children to language variety and develop confidence across linguistic genres, however, they can also become a barrier to engagement. Social media, in particular, will feature code-switching or stylised codes and acronyms (e.g. the "brb" = "be right back" sign-off in English), many of which require existing familiarity with language and culture. Particularly for younger children, or those developing their skills in the home language, such environments may be confusing, and speak to parental fears in terms of what kinds of language models children may access online (Little 2019a).

This section looks both at parental attitudes towards social media use specifically, and the affordances of social media in the language-learning context. Multilingual families and support for the minority languages are again under-represented in the literature, necessitating continued "borrowing" from monolingual, foreign language learning and English as an Additional Language contexts, as well as exploring the generic literature around access and online participation across various countries.

The complexities of social media and the Internet are rarely fully explored in studies. Instead, research frequently focuses on prevailing generic opinions, seeking to gain an overview of a specific target population. In a qualitative study among the parents of primary-school-aged children in Spain, for example, Bartau-Rojas, Aierbe-Barandiaran, and Oregui-González (2018) explored parental attitudes towards children's Internet usage, and highlighted common fears and negative emotions linked to inappropriate content and use, impact on social development, and a mentality of instant gratification. More concretely, though, parents acknowledged positive aspects linked to accessing information, developing digital literacy skills, and, again, social development, through digital communication. Language was not a focus in this study, nor was it specifically mentioned. Nevertheless, Bartau-Rojas, Aierbe-Barandiaran, and Oregui-González identified a need for parental training and awareness-raising, since many parents admitted to having little knowledge of when, how, and for which purposes their children used the Internet. There appears to be a sense of lack of control, similar to that discovered by Little (2018), with parents feeling disempowered regarding their children's Internet use. Just like this chapter, Bartau-Rojas, Aierbe-Barandiaran, and Oregui-González (2018) recommend a participatory parenting

style, authoritative in modelling good practice and engaging children in communication early on, rather than being authoritarian and simply forbidding Internet use.

Rama et al. (2012) explore older teenagers' use of massively multiplayer online games (MMOGs), specifically World of Warcraft, and its impact on language learning and socialisation, finding that it had considerable motivational impact. Their study highlights the potential of online gaming and more generic social media use, as technology provides access to an extensive network of other speakers of the language, expanding opportunities for communication and giving language use a relevance and "relatedness" (Ryan and Deci 2008) which can affect positive language engagement, use, and learning. While undoubtedly mainly relevant for older learners (since social media use across many platforms is limited to children 13+ years of age), parents of younger children can borrow from the notion of relevance to seek out age-appropriate opportunities for language engagement. Many languages will be represented on online platforms that allow user-generated content, enabling children to access films or content produced by native speakers on their topics of interest, allowing home language speaking children to fit their language use around their identity.

One aspect of language development which may challenge parents is the topic of active language use, rather than mere language consumption. Just like technology itself may be used both passively and actively, so are the opportunities for language engagement on a sliding scale, from consumer (e.g. watching content) to participant (e.g. commenting on content) to creator. These different stages obviously require different levels of language use, and hold genuine potential for extended engagement with the language, and for further exploring a bilingual or multilingual identity online (Potter 2012). Public participation on the Internet, however, has certain consequences and implications, not least taking into account aspects of privacy and online safety. It is beyond this chapter to discuss these in full. Instead, the focus will shift to specific considerations linked to language and multilingual identity when it comes to actively participating in, or creating content for, social media contexts. This is particularly true of online content, since having an Internet presence comes with a certain sense of permanence – although content can be deleted, it is never quite certain whether it is truly gone. Most parents will have ready-formed opinions on whether their children should contribute to, as well as consume, the Internet, and the purpose of this

chapter is not to influence that opinion. Instead, it suggests the opportunities for families to discuss child agency and parent-child interaction as linked to online participation. Children may, for example, create a film or poster where they do not necessarily show themselves, but which allows them to speak or write the home language. Accessing media suitable for children in the home language, which often includes age-appropriate platforms (such as monitored discussion boards), may offer another opportunity. Once more, parental collaboration is most certainly helpful in helping children grow in confidence, and in ensuring safety online. Younger children most certainly should collaborate with parents to use parental accounts, rather than having access to their own, and a monitored email address can help to keep track of account messages and communications.

For families with younger children, or families less willing to engage fully online, privacy settings make it possible to use only a small part of social media, for controlled use among family members and trusted friends. In balancing their role as both gatekeepers and enablers, it becomes important also to consider the parental role specifically in the context of technology and social media use, which is what the next section addresses.

8. Parents as gatekeepers, families as creators

To the reader of this chapter, it may appear that co-watching and co-playing comes across as the panacea, which will make children willingly access, learn and use the home language through technology. While this is a very simplistic view, it is true that parents have a vital role to play in ensuring their children have access to high-quality technology experiences in the home language, working collaboratively to develop an understanding of accessing, evaluating, financing, and using appropriate resources, since children will likely not be able to navigate the various barriers identified in this chapter.

Parents function as gatekeepers at a variety of levels, ultimately controlling access to both hardware and software. When and how children are able to access technology is therefore linked to a combination of parental beliefs, family finances, and technological awareness. Within families, it is therefore important to understand what drives parental decisions around technology use, and training and discussions involving both parents and children will help each family to find a personalised solution, which will likely be as individual as any family language policy. A positive, playful relationship of family

communication which involves all family members (Smith-Christmas 2018) allows children to bring in their expertise, preferences and understanding. In being able to share, discuss, and potentially drive access to suitable technology, children are able to take a leading role in their home language development, potentially facilitating agency and engagement. Through negotiation, for example, children who are excited about creating content such as video game walkthroughs or toy reviews may be encouraged to do so in the home language, with the extended family as the immediate audience.

With advancing technology, creating content in the home language is therefore a genuine possibility for families, facilitating active and creative use of the home language. And this content need not be limited to video only. The online book writing interface reported on by Edwards et al. (2002) earlier in this chapter, for example, has its parallel today in openly available story-writing apps, many of which facilitate multiple languages, use of original photos, and a variety of dissemination options. With the help of parents, children might use such an app to create a lasting memory of a family holiday, using family photos, written titles and short narratives, and audio-recorded content, turning technology use into a creative and joint family endeavour. Writing of fanfiction may offer a similar outlet for older children.

9. Conclusion: parents and children as collaborators in technology use

One of the most important guidelines from the American Academy of Pediatrics concerns social and collaborative technology use, encouraging parents to take an interest, test apps before the child accesses them, play them with the child, and engage the child in conversation about them. This not only helps bridge the gap between the ”online” and the “real” world, but, particularly in the context of multilingual families, crucially enables children to engage with content which may otherwise be too advanced to access. Parents here can take on a scaffolding role, facilitating true game play and shared enjoyment by providing access to higher-level language. Taking into account the child’s preferences (availability allowing) can help the child bring their own funds of knowledge (Gonzalez 2005; Gonzalez, Moll, and Amanti 2005) to the relationship. A joint exploration of what languages certain apps are available in may help parents and children negotiate common ground, possibly even allowing for increased access if this is in the home language.

Yuill and Martin (2016) demonstrated that the difference between electronic books and paper-based books is in the reduced warmth and parent-child interaction. What is yet unclear is where and how such lack of warmth might originate. Potentially, however, it may simply be that, inherently and traditionally, electronic media are not ingrained in the current *parent* generation as something that is shared, whereas the current generation of *children* is much more used to viewing technology as a social medium. It is therefore not only parenting practices but also attitudes that will need to change, with parents acknowledging their status as learner in the child's digital world. The question is how this tension will evolve, as this generation grows older and becomes parents themselves, especially as technologies continue to change, already facilitating game design and creation at user level.

In the meantime, working collaboratively with their children will enable parents to take their lead from and build on their children's interests, thus utilising technology's affordances for both active and passive language development. Jointly exploring and discussing children's interests and how these may be furthered using both technology and the home language encourages not only ongoing family communication, but also opportunities for shared and creative media use. Throughout this engagement, parents will be able to scaffold and model language, monitor children's access to age-appropriate technology and enhancing language skills. Seeing technology and social media in all their variety, and with all their possibilities, both passive and active, can help parents in building on existing family "funds of knowledge" (Gonzalez 2005; Gonzalez, Moll, and Amanti 2005), expanding cultural and linguistic understanding, as well as creating opportunities for children to lead with their own expertise, and building on motivational affordances of technology.

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