Is Alexa the Next Children's Reference Librarian?

Joanna Smith

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Introduction

If you have ever interacted with children, you likely know how curious they are. My three-year old nephew is proof of this. His favorite question is "Why?", and when you answer his question, he then replies with another "Why?". This typically goes on for a while until he is satisfied with an answer. Like my nephew, many children are naturally curious and love to ask questions, which is great because this drives them to explore, discover, and learn new things[1]. One institution that fosters children's curiosity is the public library. In this space, kids can ask children's librarians any questions, ranging from "Why?" to reference questions to readers' advisory questions (reader's advisory is the process of helping someone find something to read[2]). Moreover, children can ask questions at the public library without fear of judgement or charge and with the confidence that they will receive appropriate information and resources for their information needs from the children's librarians. But in the future it seems that there will likely be an impending shortage in public librarians, particularly children's librarians[3]. As such, children's public librarians will likely need to take on more responsibilities in order to make up for the smaller staff size. Moreover, this may result in children's librarians not having as much time to focus on answering children's reference questions. Thus, this begs the question of how children's librarians will be able to continue to manage answering their children patrons' questions in addition to performing their other tasks. One solution that some libraries, including the Los Angeles Public Library (LAPL), are currently implementing is providing online

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[1]Bruce Perry, "Curiosity: The Fuel of Development," Scholastic, accessed March 26, 2019, http://teacher.scholastic.com/professional/bruceperry/curiosity.htm.

[2] Sullivan, Michael. *Fundamentals of children's services* (Chicago: American Library Association, 2013), 145.

[3] Sullivan, Michael. *Fundamentals of children's services* (Chicago: American Library Association, 2013), 6-7.

reference tools on the children's sections of their websites[4],[5], such as the readers' advisory tool NoveList K-8Plus[6], or online databases and websites, such as the website titled "Great Websites for Kids" which is sponsored by the Association for Library Service to Children (ALSC) and which serves as a directory for credible websites about different subjects that are catered to children users[7]. In offering these online reference resources, public libraries are providing children with another avenue through which they can find credible and appropriate information catered to kids and through which they can access resources outside of the library.

But one might wonder if public libraries may want to venture further into the technology landscape for assistance in answering their children patrons' reference questions, potentially going so far as to have questions answered by smart devices, such as the Amazon Echo devices. These Echo devices, which are hands-free voice controlled wireless speakers, allow one to perform a range of activities, including playing music, purchasing items on Amazon, setting timers, answering questions, and more...all one has to do is ask Alexa, which is Amazon's voice-control system for the Echo devices, to perform the desired task[8],[9]. Furthermore, if people would like their Amazon Echo devices to perform more capabilities than what is already built into their devices, they can find and download other "Alexa skills", which are additional voice-driven

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[4] Sullivan, Michael. *Fundamentals of children's services* (Chicago: American Library Association, 2013), 6-7.
[5] "Welcome to KidsPath | Los Angeles Public Library," Los Angeles Public Library, accessed March 28, 2019, https://www.lapl.org/kids.
[6] "NoveList K-8 Plus | Book Recommendations from the Readers' Advisory Experts | What Is NoveList? | NoveList | EBSCOhost," EBSCO, accessed March 26, 2019, https://www.ebscohost.com/novelist/our-products/novelist-k8.
[7] "Great Websites for Kids Has Been Retired. | Great Websites for Kids," Association for Library Service to Children, accessed March 26, 2019, http://gws.ala.org/.
[8] Grant Clauser, "What Is Alexa? What Is Amazon Echo, and Should You Get One?," Wirecutter, last modified January 29, 2019, accessed March 28, 2019, https://thewirecutter.com/reviews/what-is-alexa-what-is-the-amazon-echo-and-should-you-get-one/.
[9] "All Things Alexa", Amazon, accessed March 27, 2019, https://www.amazon.com/Amazon-Echo-And-Alexa-Devices/b?ie=UTF8&node=9818047011.

Alexa capabilities, onto the devices[10]. While it may seem far-fetched to some to rely upon Amazon Echo devices to answer children patrons' questions in public libraries, smart device technology is already creeping its way into the public library environment. For example, some public libraries, such as the Arapahoe Library district in Englewood, Colorado, are currently renting out Amazon Echo devices to their patrons[11]. Additionally, many public libraries, including the Los Angeles Public Library (LAPL), are now promoting the hoopla Alexa skill that can be downloaded onto Amazon Echo devices in order to play rented library audiobooks and music albums directly on one's Amazon Echo, Dot, Spot, and Show devices.[12],[13]. With Amazon Echo devices already making their way into public libraries as rentable items and as vehicles for people to listen to music or audiobooks, it seems plausible that these Echo devices could be used in the public library settings for reference help in the near future. Moreover, in the Center for the Future of Libraries' article, "Voice Control", it states,

> As voice-controlled devices become more popular, they will likely become a more
> readily available tool for reference...in her 2016 Internet Trends Report, Mary Meeker
> estimated that half of all web searches will be conducted through voice and image
> searches within the next four years[14].

With this information that voice-controlled devices, such as the Amazon Echo devices, may become more relied upon for reference, it seems possible that public libraries may try to

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[10] "Alexa and Alexa Device FAQs," Amazon, accessed March 27, 2019, https://www.amazon.com/gp/help/customer/display.html?nodeId=201602230.
[11] "Echo Dot," Arapahoe Libraries Catalog, accessed March 25, 2019, https://arapahoelibraries.bibliocommons.com/item/show/1939706115?_ga=2.22983035.1950403603.15537437 36-286404343.1553743736.
[12] "Alexa, Meet hoopla!", hoopla, accessed March 27, 2019, http://hub.hoopladigital.com/whats-new/2018/7/alexa-meet-hoopla.
[13] "Alexa, Meet hoopla!", Los Angeles Public Library, accessed March 27, 2019, https://www.lapl.org/alexa-meet-hoopla.
[14] "Voice Control," Center for the Future of Libraries, accessed March 25, 2019, http://www.ala.org/tools/future/trends/voicecontrol.

introduce them into their children's library sections for reference help in the future. In fact, some elementary schools are already utilizing smart devices, such as the Amazon Echo, in their classrooms and libraries for educational pursuits. In the article, "Alexa, how can you improve teaching and learning?", Kate Roddy discusses how some charter schools are using smart devices in their classrooms to teach students digital fluency in today's technological world and to teach students how to be self-sufficient and self-reliant by encouraging them to ask the smart devices for answers to their questions, before asking their teachers[15]. Roddy also writes about one librarian at St. Anne's-Belfield School in Charlottesville, Virginia, who has a Google Home voice-controlled smart device (which is essentially the Google brand equivalent of the Amazon Echo device)[16], sitting on her library check-out counter.[17] This librarian encourages her students to ask the Google Home device various "questions concerning authors, book titles and other library resources"[18]. As such, one can see that some elementary schools and libraries are utilizing these smart devices for such pursuits as receiving reference help and teaching kids how to understand and use technology. One could argue that these positive examples of children using these smart devices for educational activities might demonstrate the potential value of installing smart devices, such as the Echo devices, into children's public libraries for reference help, especially if it would help provide busy children's librarians with an extra voice to answer questions.

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[15] Kate Roddy, "Alexa, How Can You Improve Teaching and Learning?," EdScoop, December 19, 2017, accessed on March 25, 2019, https://edscoop.com/voice-command-technology-alexa-how-can-you-improve-teaching-and-learning/.

[16] "Google Home," Google Store, accessed March 28, 2019, https://store.google.com/us/product/google_home.

[17] Kate Roddy, "Alexa, How Can You Improve Teaching and Learning?," EdScoop, December 19, 2017, accessed on March 25, 2019, https://edscoop.com/voice-command-technology-alexa-how-can-you-improve-teaching-and-learning/.

[18] *Ibid*.

Yet, there would also be many negative consequences of using these Echo devices in the children's space of public libraries. In this paper, I will discuss how public children's librarians perform their reference work and what their guiding principles are. Then, I will compare the librarians' reference process with that of the Amazon Echo devices' process, and in doing so, I hope to reveal some of the concerns and negative side effects of using Amazon Echo devices for reference work. Ultimately, I aim to demonstrate that in today's world, Amazon Echo devices should not be used in a reference capacity in children's sections of public libraries, and that there is no replacement for children's public librarians in regards to their reference work.

Guiding Principles and Responsibilities of Children's Librarians' Reference Work

Before discussing the consequences of utilizing Amazon Echo devices in the children's sections of public libraries, I first want to discuss what children's library reference work entails and the principles by which children's librarians are guided. To begin with, the American Library Association's (ALA's) Reference and User Services Association (RUSA), defines reference work as "reference transactions and other activities that involve the creation, management, and assessment of information or research resources, tools, and services"[19]. Furthermore, RUSA states that reference transactions are defined as "information consultations in which library staff recommend, interpret, evaluate, and/or use information resources to help others to meet particular information needs"[20]. Thus, reference work involves helping patrons find, access and utilize resources that will meet their information needs. Moreover, the services that reference librarians offer and how they approach their work heavily depends upon the type

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[19] "Definitions of Reference," Reference and User Services Association (RUSA), January 14, 2008, accessed March 17, 2019, http://www.ala.org/rusa/guidelines/definitionsreference.
[20] *Ibid*.

of patrons they serve, which in this case is children patrons from ages newborn to twelve. Per

interviews with library staff at the Katy Geissert Civic Center Public Library in Torrance,

California, and per the article "Reference and Information Services for Children and Young

Adults", the reference services most utilized by children patrons include getting help finding

resources for school assignments, receiving instruction on how to use tools and information,

getting access to self-help guides, getting access to good reference collections, and receiving

reader's advisory help[21], [22].

    As mentioned earlier, in order to provide children with the appropriate resources for their

information needs, children's librarians often initiate reference transactions or interviews.

However, reference interviews with children patrons can be more complicated as children may

be less skilled at formulating questions which may lead to the children's information needs going

unanswered[23],[24]. Virginia Walters discusses this in her book, *Twenty-First-Century Kids,*

Twenty-First-Century Librarians, stating that complications in the reference interviews with

children may arise from a number of factors, including "need-source mismatch", in which "the

source from which the child sought information turned out to be inappropriate" as the source

could be too general or too specific for the child's information needs[25]. Other factors that may

contribute to complications in the reference interviews with children could include "knowledge

deficiency" where children don't know enough about a subject to identify a suitable search term,

"skill shortcomings" that may prevent the child from being able to retrieve information such as

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[21] Shirley A. Fitzgibbons, "Reference and Information Services for Children and Young Adults", *The Reference Librarian*, 2, no. 7-8, (2010): 6, accessed March 10, 2019, https://doi.org/10.1300/J120v02n07_01.
[22] Katy Geissert Civic Center Library staff, in-person interview with author, March 10, 2019.
[23] Sullivan, Michael. *Fundamentals of children's services* (Chicago: American Library Association, 2013), 136-138.
[24] Walter, Virginia A. *Twenty-first-century kids, twenty-first-century librarians* (Chicago: American Library Association, 2010), 40.
[25] *Ibid.*

having trouble searching in the library catalog, "psychological barriers" that may prevent children from starting searches because they either don't know if the information exists or they are overwhelmed by the demands of the information search, or "social unease and inhibition" that is created by emotional barriers that arise when children must ask an adult for information, especially if they distrust the adult or it's uncomfortable for them to ask for help.[26] Due to the number of factors in reference interviews that may prevent children from effectively communicating what type of information and resources they need, children's librarians must find ways to overcome these hurdles in order to succeed in their reference roles.

In *Fundamentals of Children's Services, Second Edition,* Michael Sullivan discusses how children's librarians can overcome complications in the reference interviews with children by determining what information the child actually needs, for what purpose, and in "what form the answer must take to fit the child's needs"[27]. Additionally, the librarians must ensure that the information or resources that they provide to the children are "acceptable in form, format and usability".[28] As such, children's librarians should be mindful of the characteristics of the resources they recommend to children, including thinking about if the reading level of the resources match those of the children, as well as if the number of resources and the format and length of the resources (i.e. print or digital formats and the number of pages) match the children's information needs[29]. Furthermore, in order to get the answers they need to determine the appropriate resources for their patrons, children's librarians may ask different types of questions. To begin with they may ask "closed questions" that offer the children limited answer

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[26] Walter, Virginia A. *Twenty-first-century kids, twenty-first-century librarians* (Chicago: American Library Association, 2010), 40.

[27] Sullivan, Michael. *Fundamentals of children's services* (Chicago: American Library Association, 2013), 136-138.

[28] *Ibid*.

[29] *Ibid.*

options in order to identify which library resources the children need[30]. Next, the librarians may

ask "open questions*"* that allow the children "to respond in their own words and...not limit

answers to the narrow range of choices presented by the closed question".[31] Then, the librarians

may go on to ask "neutral questions" which are a subset of open questions that while "open in

form, they, guide the conversation along dimensions that are relevant to all information-seeking

situations"[32]. By asking various types of questions during their reference interviews with

children, the children's librarians can better understand the needs of their children patrons and

can more effectively direct the children to the appropriate resources.

Furthermore, while performing these reference interviews with their young patrons,

children's librarians follow the guiding principles outlined in the American Library

Association's Bill of Rights[33]. While there are a few different guiding principles in the ALA Bill

of Rights, I want to focus on the guiding principles of intellectual freedom and of privacy for

children patrons[34]. Regarding intellectual freedom, Michael Sullivan states that,

> Free inquiry and free thought are cornerstones of democracy. Libraries are places where
>
> people can decide for themselves what they will think, and children deserve this right as
>
> well. Libraries are not places where particular beliefs and points of view are presented to
>
> the exclusion of others...one parent does not have the right to restrict what ideas another

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[30] Brenda Dervin and Patricia Dewdney, "Neutral Questioning: A New Approach to the Reference Interview," RQ, 25, 4 (1986): 508, accessed on March 11, 2019, https://www.jstor.org/stable/25827718.
[31] *Ibid*.
[32] Brenda Dervin and Patricia Dewdney, "Neutral Questioning: A New Approach to the Reference Interview," RQ, 25, 4 (1986): 508, accessed on March 11, 2019, https://www.jstor.org/stable/25827718.
[33] "Library Bill of Rights," American Library Association, accessed March 26, 2019, http://www.ala.org/advocacy/intfreedom/librarybill.
[34] *Ibid*.

parent's child is explored to, and frankly, neither do librarians. For this reason, children's

libraries present a diverse collection of materials that reflect a heterogeneous society.[35]

Per Sullivan, librarians should not restrict the types of materials available to children. This is also

reflected in the ALA Bill of Rights, stating,

> I. Books and other library resources should be provided for the interest, information, and
>
> enlightenment of all people of the community the library serves. Materials should not be
>
> excluded because of the origin, background, or views of those contributing to their
>
> creation II. Libraries should provide materials and information presenting all points of
>
> view on current and historical issues. Materials should not be proscribed or removed
>
> because of partisan or doctrinal disapproval. III. Libraries should challenge censorship in
>
> the fulfillment of their responsibility to provide information and enlightenment...V. A
>
> person's right to use a library should not be denied or abridged because of origin, age,
>
> background, or views[36].

As one can see in the ALA Library Bill of Rights, particularly in section "V", it states that a

person's right to use the library and any of its services and materials should not be denied

because of one's age. Therefore, children's librarians should always try to answer children's

questions and provide them with resources, even if they disagree with the questions or if the

children's parents disagree with the questions.

Another important guiding principle of children's librarians is that of protecting their

children patrons' privacy. The ALA Library Bill of Rights states that,

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[35] Sullivan, Michael. *Fundamentals of children's services* (Chicago: American Library Association, 2013), 18-19.

[36] "Library Bill of Rights," American Library Association, accessed March 26, 2019, http://www.ala.org/advocacy/intfreedom/librarybill.

VII. All people, regardless of origin, age, background, or views, possess a right to privacy and confidentiality in their library use. Libraries should advocate for, educate about, and protect people's privacy, safeguarding all library use data, including personally identifiable information.[37]

Thus, children's librarians should keep their interactions with their children patrons confidential, regardless of the questions the children ask or regardless of the types of resources the children request. As one can see, children's public librarians not only try very hard to answer their children patrons' reference requests, but they also do so in such a way that protects the children's rights to intellectual freedom and privacy at the same time. Now that we have examined the children's librarians' reference process and their guiding principles of intellectual freedom and privacy, let's explore how Amazon Echo devices would take on the same type of reference task.

The Echo Device's Problematic Reference Process

In the examples mentioned earlier about Amazon Echo devices being used in classrooms and libraries, the children were asking Alexa for information. I am considering these interactions between Alexa and the students to be reference interviews. In order to begin a reference interview with Alexa, children patrons must first say the Echo devices' chosen wake word, which can be "Alexa, Amazon, Computer, or Echo" or they can also press the device's activation button[38]. When the children do this, recordings of what they ask Alexa is sent to Amazon's cloud,

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[37] "Library Bill of Rights," American Library Association, accessed March 26, 2019, http://www.ala.org/advocacy/intfreedom/librarybill.

[38] "Alexa, Echo Devices, and Your Privacy," Amazon, accessed March 27, 2019, https://www.amazon.com/gp/help/customer/display.html/?nodeId=GVP69FUJ48X9DK8V?ref_=ods_aucc_dp_farfield_rd.

where Amazon processes the children's requests in order to respond[39]. But unlike in reference interviews between children's librarians and their patrons, in which the librarians would ask the patrons multiple closed, open and neutral questions to figure out what information or resources best suited the children's information needs, Alexa would likely not ask any questions but just provide the children with answers from an undisclosed source, which the children would likely accept without hesitation. This is problematic for many reasons. The article "Voice Control" published by the Center for the Future of Libraries , discusses this, saying,

> As users increasingly accept the responses produced by voice-controlled technology,
> there may be concern for the relevance and authority of the information pulled for these
> responses. In a conversation interface, users will not always have the option of sorting
> through multiple possible responses (as they would in a web search), of immediately
> knowing the source of the information provided, or of seeing some of the details that
> might alert them to problems with the information. Rather, the technology simply picks
> the programed source for news, reference, etc., and conveys it to the listener, with some
> options for customization of sources built into the app.[40]

Thus, when asked questions, Alexa provides answers from predetermined sources that may not be appropriate to the information needs of the children users and that may not be credible. Moreover, if these children patrons, who we have already established have trouble communicating their information needs, receive inappropriate answers from Alexa, these children may just accept Alexa's answers and move on, even if Alexa's answers don't meet their

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[39] "Alexa, Echo Devices, and Your Privacy," Amazon, accessed March 27, 2019, https://www.amazon.com/gp/help/customer/display.html/?nodeId=GVP69FUJ48X9DK8V?ref_=ods_aucc_dp_farfield_rd.
[40] "Voice Control," Center for the Future of Libraries, accessed March 25, 2019, http://www.ala.org/tools/future/trends/voicecontrol.

information needs. Unfortunately, unlike children's librarians who dig further and ask more questions of children to ensure they provide the children with the proper information, Alexa does not. Additionally, the fact that Amazon has selected and programmed the sources from which Alexa pulls its answers is an issue, as these sources may be biased and may not demonstrate different perspectives on a topic. This is not only an issue of influencing the children's knowledge but it is also a problem of intellectual freedom by limiting what informational resources the child has access to. Furthermore, in regards to children asking readers' advisory questions about recommendations of books to read, one has to wonder if the Echo device is programmed to direct children to particular books that would provide Amazon with some sort of monetary kickback.

Moreover, by teaching children that they can rely upon Alexa for information, we are hindering the development of their research skills. Per the "Voice Control" article,

> Children and young people will grow with voice-controlled technology, becoming more accustomed to having these devices answer homework questions, settle disputes, and entertain them. All of these situations could have an impact on children's social, interpersonal, and language development as well as their intellectual development, moving them toward more simplistic inquiry and acceptance of simple answers instead of taking on more complex questions and answers.[41]

As this article mentions, by allowing children to rely upon smart devices for simple answers, we are not encouraging children to go through the process of researching answers for themselves by examining multiple types of resources. Instead, children would be encouraged to just settle for what they are told by these smart devices, which is scary.

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[41] "Voice Control," Center for the Future of Libraries, accessed March 25, 2019, http://www.ala.org/tools/future/trends/voicecontrol.

Another thing to be concerned with in the Echo device's reference process is the lack of protection for the children's privacy. In regards to protecting the privacy of the children patrons during their reference interactions with Alexa, the Echo device fails. As mentioned earlier, whenever users interact with Echo devices, recordings of what the users ask Alexa are sent to Amazon's cloud in order to improve and personalize users' experiences and Amazon's services.[42],[43] Thus, if children interact with Alexa on a public profile, their questions and their voices are recorded and stored in Amazon's cloud[44]. However, Amazon does state that if the Echo device is aware that children are using the Echo device, such as when a child profile is being used, then,

> Children may share and we may collect personal information that requires verifiable parental consent under the Children's Online Privacy Protection Act (collectively, "Child Personal Information"). Child Personal Information could include, for example, name, birthdate, contact information (including phone numbers and e-mail addresses), voice, photos, videos, location, certain activity and device information, and certain other types of information described in our Privacy Notice.[45]

Thus, when children interact with Alexa using children's profiles, some of their private information cannot be collected without parental consent, which is good. But if they are not using children's profiles, then their information is collected and recorded. Also, Amazon's language about what information they collect and what information third-parties collects is hard

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[42] "Alexa, Echo Devices, and Your Privacy," Amazon, accessed March 27, 2019, https://www.amazon.com/gp/help/customer/display.html/?nodeId=GVP69FUJ48X9DK8V?ref_=ods_aucc_dp_farfield_rd.

[43] "Alexa and Alexa Device FAQs", Amazon, accessed March 27, 2019, https://www.amazon.com/gp/help/customer/display.html?nodeId=201602230.

[44] *Ibid*.

[45] "Children's Privacy Disclosure", Amazon, accessed March 27, 2019, https://www.amazon.com/gp/help/customer/display.html?nodeId=202185560.

to understand. So, one could understand how it might be hard for some children's librarians using Echo devices in their libraries to not fully comprehend what information is or is not being collected on their patrons. This is problematic because if information is being collected about children patrons' reference interactions, it may not only go against the Children's Online Privacy Protection Act (COPPA) as mentioned above, but it would also go against ALA's guiding principles of protecting its patrons' privacy when asking reference questions and looking for information. And while children's librarians could technically go in and manually delete the children patrons' voice recordings from the Amazon cloud after each use[46], this would create extra work for the already busy children's librarians to take on. Additionally, if children are aware that their conversations with Alexa could possibly be recorded, it might change their expectations for what they can do and ask Alexa in the public library space[47], which could then prevent them from fulfilling their research needs or cause them to go looking for information from less credible institutions. Thus, between Alexa violating its users' intellectual freedom and privacy rights, and its inability to effectively carry out reference interviews, it seems problematic to use these Echo devices in children's spaces of public libraries for reference help.

The Future of Children's Librarians' Reference Work

After examining how children's librarians and Alexa perform their reference work, it's apparent that Echo devices are no replacement for children's librarians. Children's librarians honor their patrons' rights to intellectual freedom and privacy and help their patrons find appropriate resources for their information needs. Whereas Alexa simply provides an answer to

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[46] "Alexa and Alexa Device FAQs", Amazon, accessed March 27, 2019, https://www.amazon.com/gp/help/customer/display.html?nodeId=201602230.
[47] "Voice Control," Center for the Future of Libraries, accessed March 25, 2019, http://www.ala.org/tools/future/trends/voicecontrol.

its user and then records the interaction and sends it to Amazon cloud, unless it is a child's Alexa

profile. As such, it may seem unlikely that public libraries would introduce these Echo devices

into their libraries for reference due to the negative consequences of using the devices. But it

may not be as big of a stretch as one thinks. As mentioned earlier, some public libraries have

Echo devices you can rent out, and many public libraries now allow some of their digital items to

be rented and utilized via the new hoopla Alexa skill. Furthermore, the "Voice Control" article

discusses how smart devices, such as the Echo devices, are becoming more commonplace in

businesses and universities, saying,

> Voice-controlled technology may increasingly appear in public and shared spaces.
> Several hotels, including Marriott and Wynn Resorts, are testing devices from Apple and
> Amazon in hotel rooms....Schools might also find ways to use smart speaker. Saint Louis
> University has unveiled plans to provide all 2,300 student residences on campus with
> Echo Dots, all of which can access an SLU Alexa skill that provides answers to "more
> than 100" common questions, including the location of a building, event timing, or
> library hours.[48]

With hotels and universities implementing these smart devices into their infrastructure and with

these devices providing answers to multiple questions, it seems possible that at some point in the

future, smart devices like the Amazon Echo device or the Echo Dot Kids, which is an Echo

device designed with kids in mind[49], may be utilized in children's spaces of public libraries in

reference capacities. If this does happen, children's librarians must come together to create

regulations and policies regarding how to use these devices responsibly in order to protect their

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[48] "Voice Control," Center for the Future of Libraries, accessed March 25, 2019,
http://www.ala.org/tools/future/trends/voicecontrol.
[49] "Echo Dot Kids Edition, a smart speaker with 1 year of FreeTime Unlimited - blue case", Amazon, accessed
March 26, 2019, https://www.amazon.com/amazon-echo-dot-kids-edition/dp/B077JFK5YH.

children patrons' rights to privacy and intellectual freedom. Moreover, children's librarians should be transparent with their children patrons and the children's parents about the drawbacks of using such smart devices for reference help. Children's librarians could even create LibGuides or other literature about these devices and teach classes about how people can safely use these devices. Additionally, if these Echo devices or other smart devices do get installed in public libraries, children's librarians must ensure that all recordings are deleted. Also, the children's librarians could see if they may be able to establish private Alexa profiles for all patrons as opposed to using one public Alexa profile for all patrons. While these suggested steps to take if Amazon Echo devices do eventually get installed in children's public library spaces are very rough, they may at least serve as a starting point.

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     https://arapahoelibraries.bibliocommons.com/item/show/1939706115?_ga=2.22983035.1
     950403603.1553743736-286404343.1553743736.

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     edition/dp/B077JFK5YH.

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