Media participation by people with disability and the relevance of Australian community broadcasting in the digital era

Kim Stewart, Christina Spurgeon and Niki Edwards

Abstract

It is misguided to assume that social media platforms compensate people who live with disabilities from exclusion from social life; participation in broadcast media still eludes 20 per cent of Australians who live with disability. Barriers such as costs, technological inaccessibility and social attitudes mean that digital media can fail to deliver opportunities for self-representation. The Australian community broadcasting sector has a positive history of affording marginalised groups meaningful opportunities for media participation, including people with disability, but there is scope for more to be done. Indeed, this article proposes that community broadcasting increase its relevance in the digital era by continuing to critically interrogate and improve its accessibility to marginalised groups. This line of thinking is informed by recent research (Stewart, 2019) that aimed to 'listen' to people with disability who are already active in the sector, as well as other related initiatives that facilitate increased participation of people with disability in the sector; hence, an illustrative case study of recent projects at 4ZZZ is discussed.

Key Terms: community radio, disability, digital disruption

Introduction

Digital media have encouraged a participatory culture, enabling important shifts in discourses of and about disability (Ellis, Kent, Hollier, Burns & Goggin 2018; Goggin & Newell 2003). As a substantial segment of the Australian population, at close to 20 per cent, people with disability are now able to self-advocate and participate in democratic social dialogue more effectively. Many of the shifts in public perception and communication facilitated by digital media have been positive and empowering even from the start, stimulating a 'growing sense of community among those with disabilities', a group who had been 'the most isolated with the greatest sense of alienation' (Nelson 2000, 180-181). However, many negative social interactions that have historically affected people with disability, such as bullying, exclusion and exploitation, have followed them online (Didden et al. 2009; Raffalli, 2015). People with intellectual disability in particular have been excluded (Christensen, Fraynt, Neece, & Baker 2012; Jenaro et al. 2018), experiencing the World Wide Web as confusing or inaccessible. So, as the digital revolution in communication and public participation progresses, people with disability may find themselves left behind. This article draws upon Australian research with community radio participants with disability to suggest that the in-person, collaborative and community-building nature of community radio is well-matched to the needs and interests of this group to participate in public media-making. Importantly, this includes a social element that is often missing in online, physically separate interactions. However, the media also need to be encouraged and supported to identify the barriers to access that arise in their specific contexts and responses that are appropriate. This article reports on a number of sector-wide initiatives that begin to offer this encouragement and support.

Digital gains and challenges

Social media have expanded opportunities for people with disability to participate in online communities (Goggin, Hollier & Hawkins 2017). However, one of the biggest barriers to social participation remains: social attitudes to people with disability (Burch, 2018). Social media help to amplify these voices, but available evidence suggests that real transformation in social attitudes is achieved through increased access to and participation in the physical spaces and institutions of the public sphere, including media organisations. Social media enable some people with disability to find connections and overcome social isolation, but digital technologies also introduce a new range of barriers, risks and exclusions that demand critical attention. Social media and digital technologies cannot alone compensate for the exclusionary structures and effects of legacy media in relation to people with disability.

Activists with a disability are participating effectively in social media platforms to challenge and critique dominant negative stereotypes of disability. Inappropriate media stereotypes are often flashpoints for such disability activism. For example, the movie *You before me* (2016) compelled many people with disability and their supporters in the United Kingdom (UK) to protest its portrayal of the life of a person in a wheelchair as intolerable and not worthwhile (Pepper 2016). Protesters took to the streets and social media, using the #mebeforeeuthanasia hashtag. During the 2016 United States presidential elections the Twitter campaign, #CripTheVote, successfully drew attention to the use of digital techniques for social participation and self-representation by people with disability to assert social enfranchisement (Disability Visibility Project 2016). These examples illustrate some of the many ways people with disability have repurposed stereotypes to create cultural resources that support positive expressions of identity, ability and agency (Lofgren-Martenson 2013; McRuer 2006). Although the research literature on media participation contains many instances of positive interactions and experiences of families and peers (Boer, Pijl, & Minnaert 2012), negative stereotypes remain an issue in the mainstream media.

A range of high-profile individuals and organisations in Australia have also taken to social media and media arts platforms to challenge the perpetuation of negative stereotypes of disability, confront discrimination, draw attention to a deficit in mainstream media, and realise their status 'as full citizens' through self-representation (Garland-Thomson 2017, 52). Organisations such as Media Access Australia work to increase digital and web accessibility; and Arts Access Australia, the peak body for disability arts organisations, lobbies governments for policy changes that promote participation of people with disability. In addition, a network of disability advocacy organisations such as Women With Disabilities Australia undertake media and social media work, commenting on government policy, undertaking media appearances and producing their own reports on issues, in addition to lobbying for policy change (Women With Disabilities Australia n.d.). The Attitude Foundation, established by ex-Disability Commissioner Graeme Innes, challenges unrepresentative portrayals of people with disability in Australian television content (Attitude Foundation 2017). Media and creative works by people with disability can communicate a positive political agenda which highlights that people living with disability are capable, creative and politically relevant, while pointing to the conspicuous absence of their works in other media content (Barnes 2003). Digital media have provided many opportunities for self-expression and activism, and disability activists have embraced those opportunities. Social media are certainly

being used effectively to amplify the case for social change and inclusion that is made by people with disabilities. However, social media are unlikely to substitute for the transformative impact on attitudes of the physical presence of people with disability in the public sphere (Clifford 2012; Shandra 2017).

Jordon Steele-John, Greens Senator for Western Australia, is one example. He uses a wheelchair and strategically targets social media with great effect to advance disability campaigns through commentary, and from his parliamentary office he shares videos and issues media statements that highlight inaccessibility and the consequences of negative stereotypes on attitudes that filter into policy. His perspectives are regularly reported by mainstream media. In 2018, the senator delivered an impassioned speech on the deaths of people with disability in nursing homes, which went viral worldwide (Hutchens 2018). He has shared images demonstrating the inaccessibility of the built environment, including his physical exclusion from parts of Parliament House, with its many narrow doors and stairs. On one occasion the senator missed a vote in the parliamentary chamber because his wheelchair became stuck in grass outside (Australian Broadcasting Commission 2018). Such media activism has stimulated a national conversation about the isolation and invisibility of people with disability, and how inaccessibility marginalises personal agency and voice.

Negative social attitudes are a major barrier to media participation by people with disability, in part because of how they inappropriately narrow and shape opportunities for participation. Jordan Steele-John has a media team, but the opportunities for people with disability to train as media makers and to represent themselves are generally underdeveloped. Ellis (2016) notes that few journalists, actors or presenters with a disability are employed in Australian media, and this is consistent with lower levels of employment for people with disability in general. However, media work that has a public presence can also be disempowering for people with disability who find this kind of employment (Australian Human Rights Commission 2016; Gooding, Anderson, & McVilly 2017). For instance, prominent Australian disability appearance activist, Carly Findlay, has used social media, podcasting, writing and blogging to advance the rights of people living with disability. Occasionally she has been invited to contribute to ABC programming and she appeared in the celebrated *You can't ask that* (2018), a program where people with disability answer questions from the public about their lives; confronting prejudice and discrimination by offering personal insights by people who often experience social judgement. In the same year, Findlay appeared on local ABC Melbourne radio and was subjected to discriminatory jokes, ironically during an interview about micro-aggressions experienced by people with disability (Findlay, 2018). This highlighted the ambivalence of media representation of people with disability and the confronting challenges they face to share their diverse lived experiences.

Negative social attitudes are also behind bullying, abuse and exploitation that people with disability experience online and elsewhere. Although there is a paucity of quality data on cyber abuse for people with disability in Australia, research in the UK indicates that experiences of hate speech online are common, especially for young people with a disability, and are aggravated in times of government austerity policies that penalise all people from disadvantaged groups (Alhaboby, al-Khateeb, Barnes, & Short 2016; Burch 2018; Kavanagh, Priest, Emerson, Milner, & King 2018). Cyberbullying is often experienced by people with disability at a higher rate than the general population

(Kowalski, Morgan, Drake-Lavelle, & Allison 2016) and, along with hate speech, is linked to depression and anxiety in victims (Wright 2017). Experiences of digital abuse and exploitation have been a driving factor behind the development by people with disability of separate platforms such as MyDisabilityMatters.com established by Australian Dale Reardon, who is blind (Ogilvie 2016).

The anonymity of many online social media platforms also allows people to impersonate others or misrepresent themselves and their intentions, for profit (Tsikerdekis & Zeadally 2014). In 2018 Australians lost more than $340 million to internet scams, many of them taking advantage of people who were lonely or too trusting through so-called 'love scams' (Australian Competition and Consumer Commission 2018). Given that a wide range of people are susceptible to online scamming, people with disability will be vulnerable and people with an intellectual and developmental disability are also likely to be particularly vulnerable, given their cognitive impairments contribute to problematic digital literacy. People with disability experience high levels of loneliness from lack of social interaction and friendships (Macdonald et al. 2018). Those with intellectual and developmental disability can be more susceptible to unscrupulous web users promising friendship and love (Gilmore & Cuskelly 2014). Social inclusion of people from disadvantaged or vulnerable groups in face-to-face settings is a commonly proposed solution to exclusion and abuse (Kavanagh et al. 2018). Social support and friendship circles that include face-to-face interaction are means to reduce both deception and loneliness and are important features of participation in community radio (Matanda, Jenvey, & Phillips 2004; Order 2017).

Communication, friendship networks, and political activism enabled by social media have emerged as important sources of solidarity for people with disability who might otherwise be isolated because of physical disability, lack of support to travel or lack of accessible transport options, a recognised barrier to work and volunteering opportunities (Ellis & Goggin 2014; Grisé, Boisjoly, Maguire, & El-Geneidy 2018). Such benefits of social media will be more readily available to people with disability when technical limits on accessibility are addressed. While text-based Twitter has been more accessible, especially for people using screen readers (Christopherson 2016), Facebook is still developing accessibility settings that will accommodate a variety of different users, including settings for people with visual differences, navigation settings for users with cognitive impairments, and advice for people using assistive technology. Recently a group of Twitter and Facebook users have developed their own techniques to compensate for accessibility and utility deficits in these social media platforms. Calling themselves 'allies', or #A11y (short for accessibility), these online activists have written their own image descriptions for users with visual impairments and have encouraged developers on all platforms to embrace the #A11y moniker (A11y project 2018).

Recently, as more daily living activities are coordinated online, the extent to which a person can access digital technologies has been conceptualised as a measure of their inclusion in society (Goggin, Hollier, & Hawkins 2017; Harris & McCabe 2017). Access is a basic principle of the Convention on the Rights of Persons with a Disability (United Nations 2007) and extends to media access as both a consumer and a producer (Article 21). Despite widespread internet use, including by people with a disability, the quality of accessibility is variable (Ellis & Goggin, 2018; Goggin, Hollier & Hawkins 2017). Watling (2011) identifies price, digital literacy and accessibility as the three primary barriers that

are collapsed into the idea of the 'digital divide'. Many people with disability struggle to physically access and comprehend online content globally (WebAIM 2017) and require accessibility considerations. They may need assistive technologies to use computers and other devices to access the internet. For instance, people with mobility or dexterity impairments including arthritis, hand or arm injuries, spinal injuries and neurological disorders may use alternate pointing devices to control cursor movements. Failure to design technologies for intuitive easy use can be a barrier for many people, with or without a disability. For instance, physical technologies are increasingly reliant on touch screen technologies that are inaccessible to people with vision impairments; while the size and complexity of smart phone interfaces can pose a barrier to people with cognitive or dexterity issues (Goggin, Hollier & Hawkins 2017). Complex text-based content also presents challenges for the almost 44 per cent of Australians from 15 to 74 years with low literacy (Australian Bureau of Statistics 2013). However, much web content is either visual or formatted in ways that are confusing or render invisible their text-based content. For instance, poor colour contrast, ambiguous links, slide carousels, unlabelled forms, embedded tables, CAPTCHA, Flash animation and Java[1] Script all present accessibility problems (WebAIM 2017).

There are many examples of assistive adaptations that improve the accessibility of web content for people with disability. To make reading easier, people with dyslexia might use various tools to reformat text content. Magnifying devices, braille interface devices and screen readers enable people with vision impairments, blindness, cognitive issues or learning difficulties to comprehend text-based web content (Watling 2011). However, the pace of technological change means that assistive technologies constantly need upgrading. These cycles of change inevitably leave some users behind, for example those who cannot meet additional costs or keep up with the burden of re-learning new technology each time it changes (Duplaga 2017).

Poverty is a significant barrier to accessing the World Wide Web for the 44 per cent of Australians with a disability who live beneath the poverty line (Australian Bureau of Statistics 2012). The financial burden of constantly upgrading computing technology, mobile phones and other devices; the cost of internet service provision; and the cost of assistive technologies are in combination a considerable economic barrier to participation for those people who need to use a substantial part of their income for daily living activities and support (Damodaran, Gilbertson, Olphert, Sandhu, & Craig 2015). In an overview of social inclusion literature Gooding, Anderson and McVilly (2017) reported that social and economic inequality for Australians with a disability is amongst the highest in the world and that little research or policy had been targeted at increasing inclusion for people with disability, other than those with intellectual disability. People with disability across the globe often face an intersection of disadvantage factors that compound the degree of difficulty a given individual might have to surmount in contending with social and economic barriers (Richards & Sang 2018). In Australia, such barriers include being female, an Aboriginal or Torres Strait Islander person, poor, unemployed, older, lacking in social support, or having multiple disabilities (National People with Disabilities and Carer Council 2009). The 2018 Australian Digital Inclusion

---

[1] The latter three are proprietary web applications embedded into websites.

Index (Thomas et al. 2018, p. 5) found the lowest levels of digital inclusion were experienced by people on low incomes, people with mobile phone internet access only, people over the age of 65, and notably, people with disability who may experience all of these intersecting barriers that further compound disadvantage. According to the study, the 'digital divide' in Australia increased for people with disability between 2017 and 2018, despite important advances in the development of international web accessibility standards.

The Web Content Accessibility Guidelines (WCAG) (Caldwell, Cooper, Reid & Vanderheiden 2008) were created to improve global web accessibility but have only recently been made compulsory for Australian Government websites (Australian Government 2013; Goggin, Hollier & Hawkins 2017). A catalyst for change in Australia was a landmark Human Rights and Equal Opportunity Commission case (*Maguire v SOCOG* 2000), which found the Sydney Organising Committee for the Olympic Games had discriminated against a complainant who required braille literature and an accessible website to purchase tickets to physically attend the games (Goggin, Hollier & Hawkins 2017). A similar picture is evident internationally. In October 2018 the European Union reached agreement on the *Accessibility Act* (European Commission 2017). In January 2018 the United States Government updated its 1998 accessibility legislation to include the accessibility of internal and external documents and websites, including polices and training materials (Architectural and Transportation Barriers Compliance Board 2018). The global increase in litigation against corporations and government agencies that fail to ensure their services are accessible indicates increased awareness of the rights and activism that people with disability and their advocates promote (Media Access Australia 2017).

A brief history of facilitating participation of people with disability in community broadcasting

The Australian community broadcasting sector includes formal and informal networks of stations and program makers that are affiliated with many groups occupying marginal positions in Australian society. These include disability, ethnic, gender, Indigenous, religious, groups and individuals, and a host of other communities of interest. This diversity speaks to the sector's positive history of affording marginalised groups and individuals meaningful opportunities for media participation. Indeed, as a participatory media platform, community broadcasting not only pre-dated the internet, but also facilitated early, albeit uneven, internet adoption (Goggin 2004). This unevenness in the incorporation of digital technologies and networks into station operations persists, especially when initiatives are considered from the perspective of accessibility for people with disability. There are also challenges in the way that disability has been institutionalised in the sector as an informational deficit for blind and vision-impaired people; ignoring the diversity of the lived experience of disability. This narrow conceptualisation of disability has also had exclusionary effects on the participatory possibilities of community broadcasting for people with disability that are only now beginning to be systematically addressed. Recent research shows that, just like any other part of Australian society, social attitudes are a very large impediment to participation in the sector for people with disability (Stewart 2019).

The discussion so far has drawn out the complex ways in which social media and digital communications enable and inhibit participation by people with disability. In this analysis

of the role of community broadcasting, the World Wide Web is approached as a layer that interacts with this pre-existing infrastructure. For example, several sector-wide projects with significant web components are currently being undertaken by the Community Broadcasting Association of Australia (CBAA). These projects provide the sector with many digital network advantages. One of these is the Radio Website Services (RWS) project, which helps radio stations manage their web interface with the public; the station's website is one of the first points of contact between the public and the station (CBAA 2019). The RWS promotes its work as generative of 'membership' and an easy interface for users to create online content and listenership. However, when examining the RWS, the community broadcasting sector shows the same deficits as other sectors of Australian media when it comes issues of web accessibility. Of note is that many parts of the RWS do not appear to conform to the standards of the World Wide Web Consortium (WCAG) (Caldwell, et al. 2008) when tested using the web accessibility tool that it itself recommends. This means that people who rely on a screen reader may not be able to consistently access many community radio stations via the web. However, in many other important respects the community broadcasting sector has been an important platform for media access for people with disability. Curiously, this aspect of community broadcasting history is not well documented or researched. This article takes a tentative step towards addressing this gap.

The Radio for the Print Handicapped (RPH) network is active within the community broadcasting sector in responding to the needs of people with print disability, but services provided also benefit people with other impairments, including those people with cognitive impairments or low literacy, or those for whom reading in English is difficult. The RPH network has already been helping people overcome the limits to accessible information by providing readings of print media. Nationally, 1500 volunteers over eighteen stations (RPH Australia 2014) are providing radio reading services to almost five million Australians who have a print disability, inclusive of people with vision impairment, low vision, blindness; people learning English; and people with mobility issues that prevent them accessing print forms and cognitive issues (Australian Bureau of Statistics 2012). There is capacity for the RPH network, already apprised of the need for information equity for people who cannot access printed material, to expand that role to people with other disabilities and further outreach activities.

The limitations of the reading services protocol (RPH Australia 2016) means that there is less capacity for people with disability whose interests in radio production go beyond reading, or for the interests of those with a print disability. Such individuals may have an interest in music genres, youth, current affairs and reporting, and niche interests, for which the generalist community radio stations can provide. However, people with disability exist in all contexts in Australian community radio, with two-thirds of participants with disability in the first author's qualitative doctoral research study volunteering at stations outside the RPH network (Stewart 2019). Whereas many people with disability have been involved with RPH over the years, the main mode of social participation the network has promoted for people with disability has been as consumers rather than as producers of information. The increased use of the web has provided more opportunities for people with print disability who use screen readers to access information. This is a challenge to the original purpose of the RPH network as a reading service, although screen reader accessibility of online content is often problematic, as disability and technology activists highlight (A11y project 2018). One option for the RPH

network is to increase the participation of people with print and other disabilities in the production of programming and management, creating an example for effective inclusion.

Media access and participation is one of the normative foundations of Australian community broadcasting. Although participation in community radio has been, and will continue to be largely in-person, digital technologies are enabling people to participate in community radio at a distance (Lindgren & McHugh 2013). Producers are able to create content in home studios, and podcasting, or redistribution through online medium, is common in the sector by both individual producers and stations that make available online playback of programming on demand and that use social media to promote and distribute content. This will probably enable more people with disability to participate, given access to their own equipment and self-training; however, the large part of community radio training will continue to be at stations. With recent developments in accessibility at the peak training body for the sector, the Community Media Training Organisation (CMTO), community radio continues to make participation collaborative and takes that training to the people that need it.

Not surprisingly, the co-regulatory Community Broadcasting Codes of Practice (CBAA 2018), which governs licensee behaviour, has more to say about the participation of people with disability than codes that apply to any other sector of Australian media. The Commercial Radio Code of Practice, for instance, discourages material that incites 'hatred', 'contempt, or severe ridicule' of people with disability as 'not suitable for broadcast' (Commercial Radio Australia 2017), but it does not mention participation. The Community Broadcasting Codes of Practice, however, do. Diverse participation is fundamental to the sector and the codes refer to initiatives to encourage participation by a broad range of people from the community who may represent different 'ethnicity, race, language, gender, sexuality, age, physical or mental ability, occupation, religious, cultural or political beliefs' (s2). The Community Broadcasting Codes of Practice include 'Guiding Principles', goals that among others, 'contribute to an inclusive, cohesive and culturally diverse Australian community', '[p]ursue the principles of democracy, access and equity, especially for people and issues not adequately represented in other media', and '[i]ncrease community involvement in broadcasting' (CBAA 2008, 3).

Despite what might be described as a pro-active disposition in policy and codes towards participation in the sector by people who face disadvantage, actual participation rates by people with disability seem to be low. Recent research provides helpful insights into how the sector can support their increased participation by people with disability (Stewart 2019). The research aimed to learn through seeking out and 'listening' to the experiences of people with disability involved in the sector. Their voices were captured by orthodox methods of data collection and analysis. As well, using methods adapted from and informed by community broadcasting practice – journalistic social documentary and co-creative production – their views and experiences were amplified and extended to create resources that facilitated organisational and institutional listening (Stewart 2019). Participants in the study reported a range of attitudinal, physical and technological barriers to participation and involved volunteers often had little understanding of the day-to-day difficulties of people living with disability. Few stations had prioritised the accessibility of buildings and technology. Notable exceptions described by participants with disability, such as 3CR in urban Victoria and Harvey Community Radio in regional

Western Australia, indicated that the dedicated advocacy of one or more persons within a station was able to effect change, and that the presence of people with disability in the physical space where workers and volunteers have regular interactions with others could influence attitudinal change. It was found that when stations make an effort to listen to the needs of people with disability, appropriate and effective inclusion is achievable.

Community radio outreach and community voices

Community broadcasting can create empowering opportunities for people with disability to participate in real-life and online situations. Ellis (2016) notes that community radio has been a training ground for media producers with a disability who later go on to secure paid work, usually in public service media. However, community radio also has the potential to empower and include the voices of people with disability in many ways that go beyond the traditional media-as-news-production paradigm, encouraging active citizenship (Gooding, Anderson & McVilly 2017; Forde, Meadows & Foxwell-Norton 2002). Media content produced by social change movements has often been a response to state failure to provide democratic participation in decision-making, and/or media misrepresentation of issues and people affected by policy decisions (Forde 2011; Rennie 2002). Community media is thus often alternative media, creating dialogue with the audience and defying the status quo of the one-way passive consumption model of commercial media. Just as protest is a form of active democratic practice, activist media does not just produce a narrative of events; it incites action (Atton 2015).

Finding ways to reach and involve people with disability whose interest in participation is still latent requires creative responses. Many people, including musicians and journalism students, are self-motivated and able to participate with minimal encouragement. However, people living with disability may experience many personal and structural barriers to engagement and participation. Social inclusion literature suggests that action to include underrepresented groups requires outreach, a supportive and flexible working environment that is attendant to power imbalances and is based on a 'capacity' model, not a 'deficit' model of functioning, consistent with effective group work principles (Erford 2018; Goodley 1998). Outreach activities can also increase digital inclusion. In Agnew and Ripper's research (2011), a UK communications company subverted barriers to participation in digital use by delivering information and learning into the community activities already used by people with disability and other vulnerable groups they targeted. This included going to residents and community groups and giving them an experience of using and gaining competency in the technology and processes. This model has been a feature of some of the successful inclusion activities of community radio projects involving disadvantaged groups in the sector, introducing people to new technology, providing opportunities for success and increasing competency for participation, as described next.

Radio projects effectively engage people with a latent interest in media participation

People with disability are not often, specifically included in research. However there have been many projects that have sought to 'engage' non-engaged people as active citizens through participation in media. Many of these projects take a collaborative approach to media making, where experts work with novices as mentors and trainers to develop content and digital confidence (Anderson 2013; Grimes & Stevenson 2012; Musubika, 2008; Navarro 2009; Tacchi, Watkins, & Keerthirathne 2009). Three factors make such

projects different from typical in-house participation. Firstly, the experts go to the communities that are isolated or disadvantaged (usually outside a radio station environment). Secondly, they tailor teaching to the specific interests, needs and capacities of the group they are working with (rather than imposing an external content or production style, or standardised training materials). Finally, they engage learners as teachers in an action-learning approach, increasing their capacity to on-skill others. Some examples are described in more detail below. This includes European radio projects in schools (Günnel 2008), projects that worked with Roma people and rural youth in the UK (Grimes & Stevenson 2012); and, from Australia, projects that worked with Indigenous media (Meadows 2015), prisoners (Anderson 2013), women (Women On The Edge 2018), and people with intellectual disability, cognitive impairments or mental health issues (Stewart & Stimpson 2015; Windgap Foundation n.d.).

A Europe-wide collaborative project, Media Education Across Europe (META), went into schools and community groups with the intention of diversifying the gender and social bias in the European community media space (Günnel 2008). The META project explicitly used a 'dual-role' approach, a type of peer learning where learners became teachers for the next groups of participants. Gunnel reports on two community-based projects, Creating Community Voices and Digital Dialogues, where media production professionals co-created media with participants from disadvantaged groups, developing extensive learning resources that were provided without cost to the community. The program included visits to local media institutions and included developing skills in communication, technical, political and management for media novices in Poland, the UK, Austria, Finland and Spain. Participants included community media staff, educators, social and youth workers and sound engineers who were trained in the 'dual-role approach' and received specific training for working with disadvantaged learners using action oriented media pedagogy, a form of training delivery that is directed at an end goal (a media product). Role playing action and media production were employed, with the intention of expanding the learners' understanding of the political conditions of their lives, while practising communicative skills and delivery.

Grimes and Stevenson (2012) report on projects using radio training in the community as a rehabilitative tool to re-engage isolated individuals with their communities. The projects involved working with Roma (also called Gypsy or travellers) and other isolated youth living in rural England, who are typically disengaged from the community. The authors took the view that both social exclusion and the digital divide are related to lack of resources, and provision of those resources (equipment and training) empowers the disadvantaged to document their culture and stories, allowing them to respond to stigmatising media. Using a purpose-written course of training, the dual-role approach was used in snowball capacity-building, an approach that reflected the oral traditions of the group and allowed the participants to 'imagine' themselves as competent trainers. Grimes and Stevenson' also ran a group, also in a rural area, faced transport issues as well as social isolation. They took their training project to the community, but also employed self-directed audio journaling, peer review and peer learning principles. The participants went on to establish their own online radio station, demonstrating the confidence and capacity the project allowed them to develop. Both groups, the authors report, were able to use media to make meaning of their lives and the disadvantages they experienced, reducing their sense of isolation by connecting to a wider community. Importantly for the authors, these projects honed the radio producers' and trainers' skills in community

development, allowing them to break down the monolithic conception of media as strictly the province of well-resourced corporations.

In Australia, there have been numerous community radio projects aimed at engaging groups that have a latent interest in, or that may have faced difficulties in creating their own media. For instance, an extensive media network of Indigenous community stations self-represent to their communities as a specifically political project to make Indigenous voices heard (Meadows 2015). Likewise, prisoner radio, both within and outside prisons, is helping keep prisoners connected to their communities on the outside, while developing technical skills and active citizenship in situations where their citizenship is limited legally. Examples are community radio programs *Beyond the Bars* in Melbourne and *Locked In* in Brisbane (Anderson 2013). Podkalicka and Staley (2009) report on their work engaging at-risk youth at SYN Media in Victoria, a specifically youth-focused station, serving both media empowerment and therapeutic purposes. Other smaller projects reflect an understanding within parts of the community radio sector of its obligation to outreach to people who may be unaware of the opportunities community radio offers them. These projects, which undertook recording and interviewing training with portable equipment at community-based locations outside of radio station, are described further in the next section.

Catherine Maitland founded *Making Airwaves* in Sydney, a community-based radio project featuring people with intellectual and other disabilities, which ran for four years (Stewart 2019). Maitland started Making Airwaves in 2013, coming from a background of education and working with people with intellectual disability. Collaborating with not-for-profit disability service provider the Windgap Foundation, and later with Eastside FM in Sydney, the project co-created radio shows with groups of about 10 people over 8–10 week session cycles. Participants had a wide range of capacities including visual impairments and blindness, autism and intellectual disability. Creating a supportive environment that included some participants' support workers, Maitland purposefully employed the empowerment theatre principles of Augusto Boal's *Theatre of the Oppressed*, used by practitioners to develop the personal storytelling capacities of the participants, in order to enable them to better express the conditions of their oppression (Kina & Fernandes 2017; Windgap Foundation n.d.). Maitland further described her goals for the empowerment of the voices of people with disability in the first author's radio documentary *It's the People's Radio*, which accompanied the research of the same name (Stewart 2019).

Case study: 4ZZZ
In searching for the prevalence of informal community radio education or outreach projects facilitated by local stations that exemplify the participatory ethos of community radio, it became clear that most of the inclusionary projects of community radio stations were not necessarily captured in peer-reviewed literature. This is certainly the case for community radio station 4ZZZ in Brisbane. The station has engaged in numerous community-building radio projects in recent years, including projects to engage young people from refugee backgrounds in news production (the 4ZZZ news department), and a collaboration with ethnic broadcaster 4EB to reach migrants from disadvantaged backgrounds by co-creating a radio series on Brisbane and global history, *Radio In Colour*, in 2015. Since 2015 the first author has coordinated community-based radio projects, all of which have included people with disability: the Ability Radio Project groups from

2015 to 2018, Women On The Edge (WOTE) in 2017, and Taking Radio 2 Community in 2018 (resulting in the *Home Truths* stories and song series). The groups engaged people, most of whom had no knowledge of community radio prior to participation, in the co-creation of radio content that they self-directed; depending on the capabilities and needs of participants, the facilitator's technical contributions varied from advice to full production. The activities occurred at disability organisations, sexual assault services, community centres, public libraries and a homeless shelter where anyone attending those spaces was invited to participate. In the studios at 4ZZZ the *Only Human* program provided opportunities for experience in a live studio environment without the commitment or technical and organisational skills needed to run a weekly show. In 2018 *Only Human* had a team of five producers with varied abilities, including people living with autism, blindness, and Parkinson's disease. These volunteers also engaged with the station in other volunteering capacities and formed collegial networks with other station volunteers. *Only Human* provided an on-air conduit for co-produced content produced by external radio groups. In 2017 WOTE engaged an on-air announcer mentoring process combined with training and support at an external location, station tours and social events, including a final listening party to celebrate the achievements of the group. The choice of an outside location provides potentially better accessibility for people with disability and addresses challenges of small stations where resources are small, lack an adequate training space for a large group, or lack some of the resources needed for effective training. Although all these projects require a greater time commitment by producers, for example for the process of trust-building with people with disability, the outcomes are providing voice for groups that are usually invisible or silenced by stigmatisation in the mainstream media, and who often lack digital literacy.

All of these projects have bridged the digital divide in several ways: teaching digital and technical skills, providing space for voice that is transformed into digitally available programming by 4ZZZ's On Demand facilities, through the station's and project's social media, and by podcasting selected content on Soundcloud, an online audio distribution platform. The social value to participants is evident, as informally recorded in evaluation (during the WOTE project and Ability Radio Project) and formally recorded in the documentary productions of various groups including the *It's The People's Radio* series. Participation in these projects increases people's confidence in producing media. Many any individuals with disability who were involved have gone on to become long-term community radio volunteers in a range of different capacities (Stewart 2019; WOTE, 2018).These projects indicate the potential for community radio in Australia as a tool for community development, enabling the agency of people with disability to speak for themselves in a public forum. Other ways this might be realised in the sector are discussed next.

Potential areas for growth: digital radio and the RPH network
There is significant potential for community radio to support active citizenship in the form of media participation in the digital era for people with disability. For now, socially motivated platforms such as community broadcasting are more amenable to participation by people with disability than commercially motivated platforms such as global social media. It is also important in any discussion of participatory media to clearly acknowledge that the internet is not the only communications technology in town. Analogue transmission platforms such as those operated by community radio are an important part of the participatory media mix; so too are digital radio transmission

platforms, even though the hold on rights to the digital spectrum is not as secure as the analogue broadcasting spectrum (Hallett & Hintz 2010). Nonetheless, community and public radio services are recognised as the drivers behind the uptake of digital radio at a rate higher than internet radio, especially in Europe, where internet radio services have smaller audiences than terrestrial digital radio (Ala-Fossi, Lax, O'Neill, Jauert, & Shaw 2008; Hallett & Hintz 2010).

In Europe, digital radio has fast become the preferred medium of language-only stations serving specific communities of interest (Fernández-Quijada 2017). In a qualitative study of 43 key stakeholders in European and Canadian radio, Ala-Fossi, Lax, O'Neill, Jauert and Shaw found an expectation amongst stations that 'informative local content would provide the most important' for the success of digital radio (2008, 11). In Australia, terrestrial digital community radio has been slow to develop since commencing in 2011, but it is growing and now accounts for 20 percent of community radio listeners (McNair Yellow Squares 2018). In Brisbane, 4ZZZ's digital station, Zed Digital, broadcasts different content from its FM station, all of it pre-produced. Blair Martin, the coordinator of Zed Digital in Brisbane, notes that only 31 hours of content a week is locally produced, six of those hours re-broadcasting from the FM station (including the *Only Human* program) (personal communication, October 22, 2018). Local Zed Digital programs are often produced in public or private studios outside the station.

The value of local content to digital uptake and the need for more indicates that digital radio stations could provide an opportunity for people with disability to become a significant contributor at capital city stations, especially in situations where the station has inaccessible infrastructure or there are other barriers to face-to-face participation. Training programs that target people with disability in the community through non-government run disability organisations or self-advocacy groups, either through training to become producers or by co-production of digital content, can provide more opportunities in the sector for agency and voice of people with disability. When the Ability Radio Project began in 2015, its on-air programming, *Only Human*, was one of only two locally produced programs on Zed Digital. In 2016 it went over to a live show on 4ZZZs FM station and now is broadcast on both. The advent of a live-to-air program that included people with a range of disabilities regularly volunteering at the station has affected station culture. The 4ZZZ Station Manager Grace Pashley (Stewart 2019) noted the presence of people with varying abilities and the personal connections made, and encouraged volunteers to consider inclusion strategies and make the station accessible: 'People kind of know them and they want them to be the part of the community'. The station appointed the first author as Station Advocate for People with Disability in 2017, and Pashley says she has found it helpful to have someone dedicated to finding ways to include different abilities because 'You know that's where people put their hands up and say "too hard, can't do it"' (Stewart 2019, p. 139). Despite this progress, creating accessibility is an ongoing process at 4ZZZ as new insights often stem from new volunteers with different needs approaching the station, and structural changes to the ageing buildings require time and fundraising.

Recognising the need to include more people with disability who face access issues in training, the CBAA established the CMTO to meet the sector's training needs and is developing and adapting training resources to meet the needs of a wider range of abilities. In a project currently under development with the lead author, the CMTO and

RPH Australia are creating training materials to enhance the sector's capacity to include new producers with vision impairments and blindness and to expand their reading services to more rural areas, reaching more of the nearly five million people who have a print disability. Radio for the Print Handicapped Australia (RPHA) specifically refers to the intention to increase the participation of people with disability in their Regional Development Project: the project intends to provide 'new, diverse, quality local programming made by and for people with a print disability in their community' (RPH Australia 2019). While the RPH network is the most logical place to begin to increase inclusion of people with disability, there is much more to be done. Efforts should be made to actively engage with, consult and ensure that the voices of people with disability make significant contributions to this important space.

Conclusion
More people with disability can benefit from the information and communication brought by the widespread uptake of digital technology and the internet. Some people need support and assistance to use a computer effectively to communicate and participate in the public sphere. However, this article goes further to identify a range of strategies and initiatives that demonstrate how people with disability can claim this space and embrace a strong and meaningful digital presence if they are provided a mechanism, such as community radio, to facilitate their differing forms of participation. Outreach to and collaboration with community organisations are proven ways to reach people with disability who face barriers or disadvantages in access. Self-representation of oppressed groups is an important function of community radio, obligatory to its role in the media sector. Participation of people with disability in this sphere can be a vital part of democratic citizenship. It is also an agreed mechanism for the necessary erosion and, ideally, the eradication of stigma, discrimination and social barriers that prevent equality for people with disability and a diverse range of other people living with vulnerability. This is an important goal for the future of community radio, and one that can help cement its ongoing importance in an era of digital saturation.

About the Authors
Kim Stewart is a social worker, a 4ZZZ radio producer and trainer with the Community Media Training Organisation, and completed her PhD at the Queensland University of Technology in 2019.
Email: kims@4zzz.org.au

Christina Spurgeon is an Senior Lecturer in the School of Communication in the Creative Industries at the Queensland University of Technology. She is also the current chair of the Community Media Training Organisation.
Email: c.spurgeon@qut.edu.au

Niki Edwards is a Senior Lecturer in the School of Public Health and Social Work, Faculty of Health, Queensland University of Technology. She is a passionate advocate for inclusion and celebration of diversity.
Email: niki.edwards@qut.edu.au

References

A11y project. 2018. "The A11y project: A community-driven effort to make web accessibility easier". Retrieved 24 July 2019, https://a11yproject.com/

Agnew, I., and Ripper, L. 2011. "Using embedded outreach to bridge the digital divide." *Working with Older People* 15 (3): 127-134.

Ala-Fossi, M., Lax, S., O'Neill, B., Jauert, P., and Shaw, H. 2008. "The future of radio is still digital—but which one? Expert perspectives and future scenarios for radio media in 2015." *Journal of Radio & Audio Media* 15 (1): 4-25.

Alhaboby, Z. A., al-Khateeb, H. M., Barnes, J., and Short, E. 2016. "'The language is disgusting and they refer to my disability': the cyberharassment of disabled people." *Disability & Society* 31 (8): 1138-1143.

Anderson, H. 2013. "Facilitating active citizenship: participating in prisoners' radio." *Critical Studies in Media Communication* 30 (4): 292-306.

Attitude Foundation. 2017. "Attitude Foundation Content Guidelines: A guide for accessible and inclusive content." Retrieved 16 September 2019,

Atton, C. 2015. "Introduction: Problems and positions in alternative and community media." In C. Atton (Ed.), *The Routledge companion to alternative and community media*. London, New York: Routledge, Taylor & Francis Group.

Australian Broadcasting Commission (ABC). 2018. "Jordon Steele-John is asked to explain why he didn't make it to the Senate chamber in time." 2 April. *ABC News*. Retrieved 24 July 2019 from https://www.abc.net.au/news/2018-04-02/jordon-steele-john-is-asked-to-explain-why-he/9596968

Australian Bureau of Statistics (ABS). 2012. *Disability, ageing and carers, Australia: summary of findings, 2012*, cat. no. 4430.0. Canberra: ABS. Retrieved 16 September 2019 from http://www.abs.gov.au/ausstats/abs@.nsf/lookup/3A5561E876CDAC73CA257C210011AB9B?opendocument

Australian Bureau of Statistics (ABS). 2013. *Programme for the International Assessment of Adult Competencies, Australia, 2011-2012*, cat. no. 4228.0. Canberra: ABS. Retrieved 16 September 2019 from http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/4228.0main+features992011-2012

Australian Competition and Consumer Commission (ACCC). 2018. *Targeting scams: report of the ACCC on scams activity 2017*. Canberra: ACCC. Retrieved 16 September 2019 from https://www.accc.gov.au/system/files/F1240_Targeting%20scams%20report.PDF

Australian Government. 2013. *Accessibility and inclusivity*. Australian Government website. Retrieved 16 September 2019 from https://guides.service.gov.au/content-guide/accessibility-inclusivity/

Australian Human Rights Commission (AHRC). 2016. *Willing to work: national inquiry into employment discrimination against older Australians and Australians with disability*. Sydney: AHRC.

Barnes, C. 2003. "Effecting change; disability, culture and art?" Paper presented at the Finding the Spotlight Conference, Liverpool Institute for the Performing Arts. Retrieved 24 July 2019 from https://pdfs.semanticscholar.org/3083/66015761b54b390ea7fc7b714318373ef596.pdf

Boer, A., Pijl, S., and Minnaert, A. 2012. "Students' attitudes towards peers with disabilities: a review of the literature." *International Journal of Disability, Development and Education*, 59 (4): 379-392.

Burch, L. 2018. "'You are a parasite on the productive classes': online disablist hate speech in austere times." *Disability & Society* 33 (3): 392-415.

Caldwell, B., Cooper, M., Reid, L. G., and Vanderheiden, G. (Eds.) World Wide Web Consortium 2008. *Web content accessibility guidelines (WCAG) 2.0*. W3C website. Retrieved 17 September 2019 from https://www.w3.org/TR/WCAG20/

Christensen, L. L., Fraynt, R. J., Neece, C. L., and Baker, B. L. 2012. "Bullying adolescents with intellectual disability." *Journal of Mental Health Research in Intellectual Disabilities* 5 (1): 49-65.

Christopherson, R. 2016. "A brief history of accessibility on Twitter in ten tweets to mark Twitter's 10th birthday." AbilityNet website. Retrieved 24 July 2019 from https://abilitynet.org.uk/blog/brief-history-accessibility-twitter-ten-tweets-mark-twitters-10th-birthday

Clifford, S. 2012. "Making disability public in deliberative democracy." *Contemporary Political Theory* 11 (2): 211-228.

Commercial Radio Australia. 2017. *Commercial Radio Code of Practice*. Commercial Radio Australia. Retrieved 17 September 2019 from http://commercialradio.com.au/CR/media/CommercialRadio/Commercial-Radio-Code-of-Practice.pdf

Community Broadcasting Association of Australia (CBAA). 2008. *Community Radio Broadcasting Codes of Practice*. Alexandria, NSW: CBAA Retrieved 17 September 2019 from https://www.cbaa.org.au/resource/community-radio-broadcasting-codes-practice

Community Broadcasting Association of Australia (CBAA). 2019. *Radio Website Services (RWS)*. CBAA website. Retrieved 17 September 2019 from https://www.cbaa.org.au/broadcasters/promote-your-station-or-program-online

Dahlgren, P. 2005. "The internet, public spheres, and political communication: Dispersion and deliberation." *Political Communication* 22 (2): 147-162.

Damodaran, L., Gilbertson, T., Olphert, W., Sandhu, J., and Craig, M. 2015. "Digital inclusion - the vision, the challenges and the way forward." *International Journal on Advances in Internet Technology* 8 (3-4): 78-92.

Didden, R., Scholte, R. H. J., Korzilius, H., de Moor, J. M. H., Vermeulen, A., O'Reilly, M., Lancioni, G. E. 2009. "Cyberbullying among students with intellectual and developmental disability in special education settings." *Developmental Neurorehabilitation* 12 (3): 146-151.

Disability Visibility Project. 2016. *#CripTheVote: Our voices, our vote*. Retrieved 17 September 2019 from https://disabilityvisibilityproject.com/2016/01/27/cripthevote-our-voices-our-vote/

Duplaga, M. 2017. "Digital divide among people with disabilities: Analysis of data from a nationwide study for determinants of Internet use and activities performed online." *PLoS One* 12 (6): 1-19.

Ellis, K. 2016. *Disability media work opportunities and obstacles*. New York: Palgrave Macmillan US.

Ellis, K., and Goggin, G. 2014. "Disability and social media." In J. A. S. Hunsinger and T. M. Senft, (Eds.), *The social media handbook*. New York, NY: Routledge.

Ellis, K., and Goggin, G. 2018. "Disability and media activism." In G. Meikle (Ed.), *The Routledge companion to media and activism*. New York: Routledge.

Ellis, K., Kent, M., Hollier, S., Burns, S., and Goggin, G. 2018. "Reimagining Australia via disability and media: Representation, access and digital integration" *Coolabah* 24: 94-111.

Erford, B. T. (Ed.) 2018. *Group work: processes and applications* (2nd ed.). New York and Abingdon, Oxon: Routledge.

European Commission (2017, 7 December). *Commission welcomes Member States' agreement on the European Accessibility Act, but calls for more ambition on responsibilities of public authorities. Press release.* European Union website. Retrieved 17 September 2019 from http://europa.eu/rapid/press-release_STATEMENT-17-5143_en.htm

Fernández-Quijada, D. 2017. "Distinctiveness of public radio in the age of digitization." *Journal of Radio & Audio Media* 24 (1): 77-89.

Findlay, C. 2018, 28 March. "Talking microaggressions with Jon Faine on ABC Radio." Carly Findlay website. Retrieved 17 September 2019 from http://carlyfindlay.com.au/2018/03/28/talking-microaggressions-with-jon-faine-on-abc-radio/

Forde, S. 2011. *Challenging the news: the journalism of alternative and community media.* Basingstoke, UK: Palgrave MacMillan.

Forde, S., Meadows, M., and Foxwell-Norton, K. 2002. *Culture, commitment, community – the Australian community radio sector.* Brisbane: Griffith University.

Garland-Thomson, R. 2017. "Building a world with disability in it." In A. Waldschmidt, H. Berressem, and M. Ingwersen (Eds.), *Culture - Theory - Disability*. Germany: Transcript.

Gilmore, L., and Cuskelly, M. 2014. "Vulnerability to loneliness in people with intellectual disability: an explanatory model." *Journal of Policy and Practice in Intellectual Disabilities* 11 (3): 192-199.

Goggin, Greg. 2004. *Virtual nation: the Internet in Australia.* Sydney: UNSW Press.

Goggin, G., Hollier, S., and Hawkins, W. 2017. "Internet accessibility and disability policy: lessons for digital inclusion and equality from Australia." *Internet Policy Review* 6 (1). Retrieved 17 September 2019 from https://policyreview.info/articles/analysis/internet-accessibility-and-disability-policy-lessons-digital-inclusion-and

Goggin, G., and Newell, C. 2003. *Digital disability: the social construction of disability in new media.* Oxford: Rowman and Littlefield.

Gooding, P., Anderson, J., and McVilly, K. 2017. "Disability and social inclusion 'Down Under': A systematic literature review." *Journal of Social Inclusion* 8: 5-26.

Goodley, D. 1998. "Supporting people with learning difficulties in self-advocacy groups and models of disability." *Health & Social Care in the Community* 6 (6): 438-446.

Grimes, M., and Stevenson, S. 2012. "Radio as a tool for rehabilitation and social inclusion." In M. Mollgard (Ed.), *Radio and society: New thinking for an old medium.* 170-196. Newcastle upon Tyne: Cambridge Scholars Publishing.

Grisé, E., Boisjoly, G., Maguire, M., and El-Geneidy, A. 2018. "Elevating access: Comparing accessibility to jobs by public transport for individuals with and without a physical disability." *Transportation Research Part A: Policy and Practice* 125: 280-293.

Günnel, T. 2008. "The Dual Role approach: encouraging access to community radio." *Radio Journal: International Studies in Broadcast & Audio Media* 6 (2-3): 87-94.

Hallett, L., and Hintz, A. 2010. "Digital broadcasting – challenges and opportunities for European community radio broadcasters." *Telematics and Informatics* 27 (2): 151-161.

Harris, K., and McCabe, A. 2017. *Community action and social media: a review of the literature.* Retrieved 17 September 2019 from https://www.barrowcadbury.org.uk/wp-content/uploads/2017/03/TSRC-Community_action_and_social_media-fullreport.pdf

Hutchens, G. 2018. "Jordon Steele-John breaks down as he pleads for disability inquiry." 19 September. *The Guardian.* Retrieved 17 September 2019 from https://www.theguardian.com/society/2018/sep/19/jordon-steele-john-breaks-down-as-he-pleads-for-disability-inquiry

Architectural and Transportation Barriers Compliance Board 2018. *Information and Communication Technology (ICT) Standards and Guidelines 2018.* Retrieved 17 September 2019 from https://www.federalregister.gov/documents/2018/01/22/2018-00848/information-and-communication-technology-ict-standards-and-guidelines

Jenaro, C., Flores, N., Vega, V., Cruz, M., Pérez, M. C., and Torres, V. A. 2018. "Cyberbullying among adults with intellectual disabilities: Some preliminary data." *Research in Developmental Disabilities* 72: 265-274.

Kavanagh, A., Priest, N., Emerson, E., Milner, A., and King, T. 2018. "Gender, parental education, and experiences of bullying victimization by Australian adolescents with and without a disability." *Child: Care, Health and Development* 44 (2): 332-341.

Kina, V. J., and Fernandes, K. C. 2017. "Augusto Boal's Theatre of the oppressed: democratising art for social transformation." *Critical and Radical Social Work* 5 (2): 241-252.

Kowalski, R. M., Morgan, C. A., Drake-Lavelle, K., and Allison, B. 2016. "Cyberbullying among college students with disabilities." *Computers in Human Behavior* 57: 416-427.

Lindgren, M. and McHugh, S. A. 2013. "Not dead yet: emerging trends in radio documentary forms in Australia and the US." *Australian Journalism Review*,35 (2): 101-113.

Lofgren-Martenson, L. 2013. "'Hip to be Crip?' About crip theory, sexuality and people with intellectual disabilities." *Sex and Disability* 31: 413-424.

Macdonald, S. J., Deacon, L., Nixon, J., Akintola, A., Gillingham, A., Kent, J., and Highmore, L. 2018. "'The invisible enemy': disability, loneliness and isolation." *Disability & Society* 33 (7): 1138-1159.

McNair yellowSquares. 2018. *Community radio national listener survey 2018.* Sydney: Community Broadcasting Association of Australia. Retrieved 17 September 2019 from https://www.cbaa.org.au/sites/default/files/media/McNair%20yellowSquares%20-%20NLS%20-%20Main%20Report%202018%20-%20FINAL-nopg13.pdf

McRuer, R. 2006. *Crip Theory: Cultural Signs of Queerness and Disability.* New York: New York University Press.

Matanda, M., Jenvey, V., and Phillips, J. 2004. "Internet use in adulthood: loneliness, computer anxiety and education." *Behaviour Change* 21 (2): 103-114.

Meadows, M. 2015. "Blackfella listening to blackfella: Theorising Indigenous community broadcasting." In C. Atton (Ed.), *The Routledge Companion to Alternative and Community media.* Abingdon, Oxon and New York: Routledge.

Meadows, M., and Foxwell-Norton, K. 2011. "Community broadcasting and mental health: The role of local radio and television in enhancing emotional and social well-being." *The Radio Journal* 9 (2): 89-106.

Media Access Australia. 2017. "Website inaccessibility court cases on the rise." Media Access Australia website. Retrieved 17 September 2019 from https://mediaaccess.org.au/latest_news/australian-policy-and-legislation/website-inaccessibility-court-cases-on-the-rise

Musubika, J. 2008. "Women's potential and challenges in community radio: the case of Mama FM." *Agenda: Empowering Women for Gender Equity* (77): 127-134.

National People with Disabilities and Carer Council. 2009. *Shut out: the experience of people with disabilities and their families in Australia.* National Disability Strategy Consultation Report. Canberra: Australian Government. Retrieved 17 September 2019 from https://www.dss.gov.au/our-responsibilities/disability-and-carers/publications-articles/policy-research/shut-out-the-experience-of-people-with-disabilities-and-their-families-in-australia?HTML

Navarro, D. 2009. "Transforming public space: a local radio's work in a poor urban community." *Development in Practice* 19 (4/5): 621-629.

Nelson, J. A. 2000. "The media role in building the disability community." *Journal of Mass Media Ethics* 15 (3): 180-193.

Ogilvie, F. 2016. "My Disability Matters: the social media site helping to connect people with disabilities." 27 December. *ABC News.* https://cbf.org.au/documents/2018/08/joy-social-connection.pdf/http://www.abc.net.au/news/2016-12-27/website-creates-online-community-for-people-with-disabilities/8149054

Order, S. 2017. *Community radio: The joy of social connection.* Sydney: Community Broadcasting Foundation Ltd. Retrieved 17 September 2019 from https://cbf.org.au/documents/2018/08/joy-social-connection.pdf/

Pepper, P. 2016, 2016. "We long to watch disabled characters like us. Instead we get Me Before You." 2 June. *The Guardian.* Retrieved 17 September 2019 from https://www.theguardian.com/commentisfree/2016/jun/01/me-before-you-suggests-better-dead-than-disabled

Podkalicka, A., and Staley, J. 2009. "YouthWorx Media: Creative media engagement for 'at risk' young people." *3C Media* (5), Retrieved 17 September 2019 from https://www.cbaa.org.au/article/youthworx-media-creative-media-engagement-%E2%80%98-risk%E2%80%99-young-people

Radio for the Print Handicapped (RPH) Australia 2014. *RPH Australia profile.* Retrieved 17 September 2019 from https://www.rph.org.au/wp-content/uploads/2014/10/RPH_brochure_aug14-WEB-1.pdf

Radio for the Print Handicapped (RPH) Australia 2016. *Protocol for RPH broadcasting.* RPH Australia website. Retrieved Retrieved 17 September 2019 from https://www.rph.org.au/rph-protocol

Radio for the Print Handicapped (RPH) Australia. 2019. *Regional Development Project.* RPH Australia website. Retrieved 24 July 2019 from https://www.rph.org.au/about-us/regional-development-project/

Raffalli, P. 2015. "Cyberbullying of children with special needs: understanding the scope of the problem." *Journal of the American Academy of Child and Adolescent Psychiatry* 2 (3): 11-13.

Rennie, E. 2002. "The other road to media citizenship." *Media International Australia* 103 (1): 7-13.

Richards, J., and Sang, K. 2018. "The intersection of disability and in-work poverty in an advanced industrial nation: The lived experience of multiple disadvantage in a post-financial crisis UK." *Economic and Industrial Democracy* 40 (3), Retrieved 17 September 2019 https://doi.org/10.1177/0143831X17750474.

Shandra, C. L. 2017. "Disability and social participation: the case of formal and informal volunteering." *Social Science Research* 68: 195-213.

Stewart, K. 2019. *It's the people's radio: People with disability in community radio in Australia.* Doctorate of Creative Industries exegesis + radio documentary, Queensland University of Technology, Retrieved 17 September from https://eprints.qut.edu.au/view/person/Stewart,_Kim.html

Stewart, K., and Stimpson, B. 2015. *Ability Radio Project: building confidence, social inclusion and skills for people with cognitive differences*, pilot course materials 2015. Retrieved 17 September from https://www.cbaa.org.au/sites/default/files/Ability-Radio-Project-Training-Guide-2016.pdf

Tacchi, J., Watkins, J., and Keerthirathne, K. 2009. "Participatory content creation: voice, communication, and development." *Development in Practice* 19 (4/5): 573-584.

Thomas, J., Barraket, J., Wilson, C. K., Rennie, E., Cook, K., Louie, Y. M. and MacDonald, T. 2018. *Measuring Australia's Digital Divide: The Australian Digital Inclusion Index 2018*. Retrieved 17 September from https://digitalinclusionindex.org.au/wp-content/uploads/2018/08/Australian-digital-inclusion-index-2018.pdf

Tsikerdekis, M., and Zeadally, S. 2014. "Online deception in social media." *Communications of the ACM* 57(9): 72-80.

United Nations. 2007. "Convention of the Rights of Persons with a Disability." United Nations website. Retrieved 17 September from https://www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities.html

Watling, S. 2011. "Digital exclusion: coming out from behind closed doors." *Disability & Society* 26 (4): 491-495.

WebAIM. 2017. Screen reader user survey #7 results. Retrieved 17 September from https://webaim.org/projects/screenreadersurvey7/

Windgap Foundation n.d.. *Making Airwaves*. Retrieved 17 September from http://www.windgap.org.au/making-airwaves-radio-program/

Women on the Edge (WOTE). 2018. Facebook page. Retrieved 17 September from https://www.facebook.com/4ZZZWomenOnTheEdge/

Women With Disabilities Australia (undated). *Background, aims and objectives*. Women with Disabilities Australia website. Retrieved 17 September from http://wwda.org.au/about/background/

Wright, M. F. 2017. Cyber victimization and depression among adolescents with intellectual disabilities and developmental disorders: the moderation of perceived social support. *Journal of Mental Health Research in Intellectual Disabilities* 10 (2): 126-143.