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RadioActive101-Learning through radio, learning for life:

An international approach to the inclusion and non-formal learning of socially excluded young people

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Abstract This article describes an original international approach to inclusion and non-formal learning of socially excluded young people, through participatory internet radio - RadioActive101. First, we critically discuss the social and digital exclusion of young people. We then describe our approach - that includes participatory action research methods that are influenced by the work of Dewey and Freire, and operate as a process of complex intervention. This supports the inclusive co-production of radio content in ways that support non-formal learning in two EU contexts – the UK and Portugal. We then summarise and compare a qualitative investigation of RadioActive101. This showed positive results, with important similarities and differences between the two contexts. Participants reported that RadioActive101 was motivating and contributed to the development of contemporary skills, and also stimulated improvements in psychosocial dimensions such as confidence (self-efficacy) and self-esteem. This investigation informed the development of an original recognition system for non-formal learning that maps EU Key Competences for Lifelong Learning to radio practices and activities that are recognised through electronic badges. Our final reflections emphasise that in order to support the non-formal learning of socially excluded young people we must foreground our attention to fostering psychosocial dimensions alongside developing contemporary competences.

Keywords: non-formal learning; socially excluded young people; contemporary skills; internet radio; pedagogical issues

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1. Introduction: Social Exclusion, the Digital Divide and Participatory Radio

Since the original industrial revolution, society has been challenged with how to engage young people at the 'margins' of society (Smith, 2013). With the emergence of a 'Fourth Industrial Revolution' (Schwab, 2016) alongside the Europe-wide impact of the 2008 Financial Crisis (European Commission, 2009), this continues into the 21st Century. As a result, young people across Europe face several embedded, connected and complex challenges, including those related to unemployment (Caliendo and Schmidl, 2016), lack of social inclusion (Weil et al., 2017) and limited digital literacy (Helsper and van Deursen, 2015). In threatening their life chances and ability to contribute to society, these all serve to place young people outside the prevailing social organisation of society, as emphasised by Labonte (2004), Mackenzie (2012) and Sealey (2015).

Coming to prominence in France during the 1970's, through Rene Lenoir's work (de Haan, 2001) and in the UK under New Labour (Levitas, 1998), a term that is used to describe and elucidate this sort of displacement and absence of opportunity for young people is 'social exclusion'. Although this term also has its critics (e.g. Peace, 2001; Burchardt, Le Grand and Piachaud, 2002; Schwanen, 2015), it is arguably the most useful one in capturing the experience and position of the young people experiencing these sort or problems. Why? Because, in contrast to a descriptor like hard-to-reach, which places responsibility on people for being 'difficult' to engage (Brackertz, 2007), social exclusion shifts accountability from individuals to society or the State (de Haan, 2001). In other words, people do not choose to be excluded, rather exclusion is imposed from outside (Thuesen, 2010).

Therefore, when considering young people in this category, we draw upon, but adapt, Levitas' (2007) definition in seeing social exclusion as a multidimensional issue involving the systemic and systematic denial of access to the same information, resources, rights and opportunities that are available to the majority of people in society. Which raises the question of how can we support socially excluded young people in achieving similar access to information, resources, rights and opportunities as their more advantaged and 'included' peers? A question, in contemporary society, that also must consider the particularities of the digital age that we now live in.

1.1. The Digital Divide

With recognition regarding the impact of digital practices and related technologies on people's lives in particular (Seale, 2009; Department of Culture, Media and Sport, 2014), a further source of exclusion prevalent in modern, information societies concerns the ability to effectively access, use and critically and creatively exploit digital technologies and practices, because:

"in this new world of disruptive innovation and digital advancement, it is those individuals, businesses and societies who have the greatest level of access, ability and understanding who will continue to prosper. Those that have the least will fall behind and find it progressively harder to catch up" (Barclays, 2016, p.3). The unequal access to digital technologies and related practices, in ways that leads to wider social exclusion (Helsper, 2008; Easton, 2014), has been described as the Digital Divide (Norris, 2001; Loader and Keeble, 2004). This form of inequality is disproportionally felt by socially excluded groups (Digital Inclusion Team, 2007), who have a greater likelihood of being digitally excluded (Department of Culture, Media and Sport, 2014) and who struggle to alter their situation (Seale, 2009).

1.2. Participatory Internet Radio – RadioActive101

To address these issues of social exclusion in a contemporary context where there is also a digital divide, a relatively large-scale, cross-disciplinary and international team of academics, practitioners and charities have devised an original approach using participatory internet radio - called RadioActive101. This project addresses the social and digital challenge of how to *include* those outside of the 'mainstream' alongside enabling them to *develop contemporary and digital skills and competences* to effectively participate in the modern world. In this context, the latter refers to having better chances of gaining employment, and more generally, being able to participate more fully in civic society, particularly through digital means. This project has been supported by the Nominet Trust (UK) and the EU Lifelong Learning Programme (Europe), and in this paper we focus on a project working with 233 socially excluded young people aged 12 to 25 years old, who were members of seven partner youth organisations across two countries - the UK and Portugal.

In particular, RadioActive101 has been concerned with addressing interjacent forms of exclusion (Ragnedda and Muschert, 2015) through a co-production model that acknowledges young people's rights to be included and have a voice (Glassman and Kates, 1990). This is exemplified by the project's UK tagline "voices that are usually unheard" (radioactive101.org).

Through adopting this stance, the focus is on activities that are initiated by young people themselves, who share decision-making power and responsibilities with adults (Hart, 1992). We then go beyond this initial engagement by allying it to a combination of a relatively old technology (radio) and a relatively new one (the internet), providing socially excluded groups with a platform to locate their 'voice' and start using it effectively, alongside a vehicle to develop both Technical (e.g. sound recording and webcasting) and Conceptual (e.g. critical and creative thinking) Digital Skills (Weston, Lumley and Curvers, 2018). In doing so, RadioActive101 also represents a counter-hegemonic form of media (Cohn, 2016), enabling young people to address themes that are important to them and usually not covered by mainstream media outlets (Gustafsson, 2012), alongside building contemporary skills so that they can harness technology to address their problems (Weston, Lumley and Curvers, 2018).

Consequently, we draw upon a relatively longstanding (Jones and Lovett, 1971), but arguably underutilised tradition (Fraser and Restrepo-Estrada, 2002) of using radio to engage the most excluded groups, a tradition identified as successful, in relation to: providing a platform for non-traditional voices, skills acquisition and reflection (Gustafsson, 2012); civic engagement, participatory communication and problem-solving (Fraser and Restrepo-Estrada, 2002) and co-producing non-formal education programmes, documenting social change and ameliorating formal education's failings (Jones and Lovett, 1971). Crucially, we re-render these advantages of community radio through implementing them in a different and more digital way - that is more accessible, sustainable and extensible. We do this through: deliberately avoiding a bespoke 'radio station' and instead, catalysing engagement, co-production and broadcasting from the participating organisations; utilising existing or low-cost technologies to maximise involvement and sustainability; and, through using internet radio (Webcasting of sound) linked to related social media within our digital hubs (i.e. radioactive101.org and pt.radioactive101.eu) we can have a reach and develop networks that are local, national and international.

We also build upon the work of Chavez and Soep (2005), who highlighted the growing value and potential of using multimedia tools that can realise Freirian ideas (see below) around emancipatory education (1970), through what they term a 'pedagogy of collegiality'. Chavez and Soep (2005) recognise that this progressive educational approach facilitates enhanced engagement, participation and critical thought amongst young people, transforming the educational experience from a passive to an active one.

2. Methodology: Inclusion, participaton and co-production through applying Dewey and Freire

As alluded to above, our approach builds upon the theoretical work of educationalists John Dewey and Paulo Freire linked to participatory action research methods (Jacobs, 2016; Reason and Bradbury, 2008). Both Dewey (1910) and Freire (1970) criticised what Freire coined the 'Banking System' of education, where teachers deposit 'knowledge' in students, who then reproduce that information via a 'mechanical' process of measurement and examination. In contrast, their approach and ours is a more collaborative and egalitarian one (Freire, 1997), with young people involved in coconstructing knowledge, utilising their real, lived experiences to formulate broadcast content (Hart, 1992). This production process necessitates and stimulates authentic and critical conversations about the issues and challenges in young people's lives, such as racism, crime and poor mental health.

For Dewey (1902), the importance and role of experience connects to ideas about effective education– when educational content is presented so that learners can relate their own experiences to it. In considering learning experiences further, Dewey (1938) explores the function of continuity and interaction, where continuity emphasises that an experience will influence a person's future, creating a continuum of experience from past, present and future, and interaction refers to the situational influence on a person's experience i.e. a person's present experience is a function of past experiences that then shape their future experiences. Regarding our approach, the production of themed broadcasts are directed by relevant life experience. This is achieved through promoting the 'epistemological curiosity' (Freire, 1997) of problem-posing (Freire, 1970), where participants address their own concerns, rather than those of others. Consequently, context is key. This allows participants, through dialogue, imagination and research, to become conscious of their own position within society. However, as Freire notes, this emerging critical awareness or 'conscientizacao' (1970) is insufficient - only through 'praxis', action based on knowledge and reflection, can young people address their situation. And this action takes place because of RadioActive101's embedded presence within the organisations that young people already attend (see below). One example occurred through the production of a broadcast on bullying with a UK-based organisation. Because the work was rooted within that organisation, participants built upon their emerging awareness about the causes and impact of bullying (conscientização) in creating a peer-led anti-bullying policy for young people and staff (praxis).

2.1. Implementing Inclusion and Co-production

To expand on the mechanics of our inclusion approach, it is realised through working with youth and community organisations of which young people are already members. These organisations are often already considering or addressing significant 'real life' challenges for young people. So RadioActive101 can be adopted as a methodology for understanding and addressing these challenges. Therefore, these organisations become part of the RadioActive101 hub, but crucially, all of the researching, production and broadcasting activities are performed within these organisations. This collaborative approach to co-production, where the core RadioActive101 team (of academics and media practitioners) facilitate the co-production within the young people's own organisations, is important and realised in a number of ways. The sites for co-production are initially established through exploiting ongoing informal connections that are strengthened through face-to-face meetings about potential participation. Once these collaborations progress and shows are broadcast, other youth organisations in similar informal networks approach RadioActive101 or are approached by the existing youth organisations. Consequently, the network of participants develops in an organic way, by 'spreading through' the networks of the participating organisations. They are supplied with or use their existing technologies to realise a low-cost standard 'RadioActive101 technical kit' (see Ravenscroft et al., 2015b), consisting of recording devices, microphones, radio streaming service and mixing desk. They are also provided with initial training to use the essential kit, alongside ongoing lighter-touch and 'just in time' support as their co-production operations begin.

An important aspect of this approach *is that the young people and non-formal organisations co-produce radio within their own contexts, following their own values, working patterns and practices,* without having to attend a separate 'radio station'. This means that RadioActive101 operates according to the principle of voluntary participation (NYA, 2000; Davies, 2005), where young people make choices about their involvement. Thus, by choosing to engage, young people make a commitment to be active participants in their own learning experience (Freire, 1970).

2.2. The 'personality' of RadioActive101 in the UK and Portugal

In applying the above approach to inclusion and co-production, it is useful to signal here how this creates a type of 'personality' for each national platform that is influenced by the ongoing activities in the organisations, the expertise within the facilitating team and the particular issues affecting the

young people. This resulted in shows including subjects such as knife-crime, mental health and 'coming out' as gay in the UK and opposing racism or discrimination, and projecting identity and awareness through events (such as sports) in Portugal.

The combination of education, psychology and media performance experts as facilitators in the UK led to shows that were personal and often inwardly psychological, and often story or narrative based. Whereas the facilitators in Portugal were journalistic and media academics and practitioners, which led to a greater emphasis on communicating and covering events, as well as connecting outwards to family members and other organisations.

2.3. Inclusion and Co-production in the UK

During the first 31 months of the project the UK partners worked with 163 young people and 29 'support actors' who were mostly youth workers (192 total participants), at three community organisations focusing on young people: Organisation 1 (99 young people) is an open-access youth centre working with a range of young people, including those who are Bangladeshi, who live in social housing and who reside in living environments rated in the 10% lowest in England; Organisation 2 (24 young people) is a Learning Disability Youth Club for young people aged 13-25 with learning and physical disabilities and Organisation 3 (40 young people) is a youth-led participatory community organisation providing targeted provision in an area of high crime and social housing.

The UK project website – Web-address that is shown in Figure 1 below.



Figure 1. RadioActive101 UK Web-site

This screenshot shows: a photograph of a live broadcast in full flow; a number of menu items (above the photograph) linking to a range of features including "LISTEN LIVE", show "SCHEDULE", the considerable "ARCHIVE, "TESTIMONIALS" from participants and relevant "PUBLICATIONS" from the project. Additionally, larger buttons below the photograph link to the EU hub "RADIOACTIVE101 EUROPE" and prompt visitors to "GET INVOLVED".

The technical setup and infrastructure is described in full in Ravenscroft et al., (2015a), where the heart of the project is this attractive and interactive web-site authored in WordPress that also provides blogs and informational features, alongside integrated project specific Facebook, Twitter, Instagram and SoundCloud accounts.

The young people in the UK produced 33 original shows averaging 41 minutes each that required 987 hours of preparation, training and broadcasting. During this time the project web-site attracted 7,652 page views, and 4,082 unique views.

2.4. Inclusion and Co-production in Portugal

Eight months after the UK site had begun activity Institution2 began its implementation of Radio-Active101 in Portugal. Institution2 used its expertise in journalistic research, including social media skills, and communication practice, to work with a main group of 70 socially excluded young people (12-21 years old) and 8 support actors - including family members, social workers and adults from the community (78 participants in total), across 4 associate partners. These four centres in Portugal worked within a Government umbrella programme Programa Escolhas (The Choices Program) that had been created to work with children and young people from areas of deprivation. Organisation 4 (20 young people) is located in a parish in Porto with social and economic difficulties and poor social housing. Organisation 5 (24 young people) is located in Porto in a similarly deprived area comparable to Organisation 4 and its young people had low digital competences, but gained some benefit from being in the traditional part of the city with its associated tourism. Organisation 6 (8 young people) is located in a peripheral social housing scheme of around 2,000 people, in Coimbra, many of whom are reliant on social income, including a significant Roma community (Brites et al., 2013). Organisation 7 (18 young people) is a youth centre in Gondomar, in Greater Porto.

The website in Portugal (Web-address) is shown in Figure 2 below, which shows images of a coproduced show involving young people and their community

The website has a similar configuration to the UK website. In the Portuguese case, we only highlight the buttons that relate to the communities that wanted to have their own space online.

Summarising, after twenty six months of radio production, participation in Portugal had included 70 young people and 8 support actors, who co-produced 32 shows averaging 36 minutes each that took 560 hours of preparation, training and broadcasting. During this time the web-site was highly used and gained a significant number of regular followers, having 10,489 unique page views and 15,788 views in total.

Figure 2. Portugal Web-site, showing images during the co-production of a show



2.5. Comparisons of the Radio Co-production

The organisations in the UK and Portugal provided a basis for a comparative analysis, particularly because these socially excluded young people attended similar organisations that were located in the poorer parts of major cities.

There were similarities between the UK and Portuguese approach to co-production of shows. Although young people could produce whatever content they wanted to, providing it conformed to the Governance and Editorial Model (GEM), it was significant that they didn't choose to go for the 'safe option' of just DJ'ing and music performance. The GEM, created with the partner organisations, shapes and directs what counts as reasonable and acceptable broadcast content, such as guidance about avoiding offensive language and presenting balanced arguments. It was developed in-line with the UK Ofcom² broadcasting code. Following industry standard codes of conduct, young people preferred to make the sort of magazine type programmes that are described below. They were predominantly *dialogue and issue based*, typically presenting and showcasing young people's perspectives and lived experiences in ways that often offered a *counter narrative* and counter-hegemonic discourse compared with the more populist viewpoints of mainstream media. This meant that the coproduction was realised through a process of 'complex intervention' that involved continued engagement and sustained activity through participatory action research practices (Jacobs, 2016; Rea-

² https://www.ofcom.org.uk/home

son and Bradbury, 2008), that all occurred around a 'heart' of internet radio and related digital activities. This approach contained an appropriate balance of generality of the intervention whilst also being sensitive to contextualised differences in its realisation on the ground.

Summarising, the generic aspects of RadioActive101 include: working with youth organisations in their own contexts; having a similar low-cost technical kit; following the same Governance and Editorial Model (GEM); having a cascaded facilitation model (where facilitator involvement reduces as expertise and experience of the young people develops); and, the option to have an accreditation model based on electronic badges. These core features are then operationalised within local organisations, people and cultures, who co-produce and collaborate based on particular events as well as similar or different challenges and drivers in their particular contexts.

In the UK this is demonstrated through a diverse radio archive, including: young learning disabled people who give their harrowing accounts of bullying in London (mentioned earlier); issues affecting the lives of young Lesbian, Gay, Bisexual, Transgender and Queer (LGBTQ) people. This was examined through the historical lens of gay music anthems in conjunction with the use of drama as a device for supporting young people who are thinking of 'coming out'. In another show young women discussed several topics, including body image, the media's impact on their self-esteem and on being female in the music industry³.

Similarly, in Portugal themes selected for shows were far reaching in their societal scope. 'Say no to discrimination'⁴ contained news and interviews on issues such as the International Fight for Eliminating Racial Discrimination Day and the SOS Racism initiative. 'Our Voice' was the second show from Organisation 7, reflecting a particular context where different generations interacted and where activities, for instance related to poetry, helped to create intergenerational bonding.

Summarising, the general RadioActive101 approach and model was successfully applied across seven organisations and two countries, as evidenced by the relatively high levels of engagement and sustained participation in in all settings and the variety and number of co-produced shows. However, the general approach also deliberately allowed for variations on the facilitation and co-production emphasis, that could be issue driven (e.g. mental health), event-driven and temporal (e.g. linked to sports events) and focus specifically on young people's voice or promote greater intergenerational discourse and understanding.

3. Summary of the evaluation of RadioActive101

A qualitative evaluation of RadioActive101 in these two countries has shown positive and complementary findings, alongside some notable differences. A qualitative approach was adopted because we wanted to develop a picture of the skills or other dimensions that were being developed by participants, and how they felt these had changed. It wasn't possible or appropriate to adopt a more

³ http://uk2.radioactive101.eu/audio/details/body-image-media-and-music/

⁴ http://pt.radioactive101.eu/2014/04/03/catapulta-programa-04/

quantitative approach, as we were ostensibly investigating the impact of the radio intervention, and not aiming to measure pre-defined variables or dimensions.

In both cases young people and support actors who were most involved were chosen for the studies, so these were critical case purposive samples. The interviews with young people and their support actors were subjected to a thematic analysis. The evaluation is described in detail elsewhere (Ravenscroft et al., 2015a), so below we summarise it and highlight particular points for the purposes of this paper.

3.1. Qualitative Investigation in the UK

A study in the UK was conducted first, performed after the project had been running for 15 months (see Ravenscroft et al., 2015a). The most insightful findings emerged from a focus group with 6 youth workers and interviews with 11 young people.

Results from these interviews reported that young people were developing their voice, were motivated and enjoying the activities, and were developing digital and employability skills. Additionally, adoption of the co-production model meant that these developments happened through team-work, in ways that supported participants in becoming more confident. Also notable was that young people felt they were taking initiative, acting responsibly and being treated respectfully, whilst also developing general skills that were transferable beyond the project. Of particular note was the frequent reporting of significant psychosocial development in characteristics like confidence and self-esteem. Indeed, the necessity of, and model for, developing a 'platform' of improved confidence and self-esteem prior to and alongside the non-formal learning of digital literacy and employability skills was a key early finding. It appeared that once the socially excluded groups developed the confidence and competence to perform activities they previously thought were beyond them, such as the co-production and broadcasting of radio shows, they seemed empowered to learn other things and to develop other related competences⁵. In achieving the above, participants felt a clear sense of 'ownership' of their shows, and that they were the central part of, and not 'performing for', RadioActive101.

Below we give a closer and more detailed insights into our findings through presenting some *il-lustrative comments from the participants in the UK and explaining what these are showing*. In the next sub-section we present other quotes from the Portuguese evaluation, presenting these, in the first instance, separately to retain some coherence regarding the 'personality' of each site presented earlier, before going on to synthesise the findings.

The young person below talks about how they are developing a valuable communication skill, the ability to speak more formally and switch register:

⁵ Note, this is not apparently selection bias amongst those participating in RadioActive101, as youth workers have noted that deciding to participate in other activities does not lead to the same level of reported improvements.

"But I think ... so when you're speaking about ... something formal, then you have to use formal language", boy aged 17, Organisation 3, UK

The same young person then goes on to highlight that it is not just the register that is important, but also the development of critical thinking skills behind the dialogue:

"but when you're on radio you're communicating 'cause ... you're not just speaking without thinking, you're actually thinking about this ... what you're saying."

Both the above quotes are important, because generally, they show that this young person was reflecting on their own learning behaviour and changing it accordingly. A similar point is then made, about the motivating value and confidence building effect of being able to develop a radio item that people can hear, without the need to be physically represented.

"And this motivates you ... in a way that is not embarrassin' but because no-one actually sees you, they just hear your voice ... and I could be anyone, so that motivates you to just build your confidence up a little bit to doing things where actually people do see you", boy aged 17, Organisation 3, UK

The above quote also demonstrates a subtle but important point about this young person's perception of their own identity linked to their performance. He considers radio, that is dialogue and voice based, as relatively more anonymous than situations where he is visible, and therefore it provides a motivating and confidence building step towards potentially being more visible about his performance.

Along similar lines, another young person from Organisation 1 shared their sense of new-found confidence, linked to being able to develop their voice in an enjoyable way:

"...I think the project has given me a voice, so I can speak to anybody who's listening and like, the radio project's helped me to speak more and like, enjoy myself", girl aged 14, Organisation 1, UK

Alongside increased confidence is the perceived value of experience on the project, as seen by a male youth worker at Organisation 3, himself a recent graduate talking about this radio project in terms of its increased potential for employment in a competitive job market:

"You're ahead of everyone else because you've got experience. That's the most important thing", male youth centre worker as Support Actor, Organisation 3, UK

Another comment from a young person mentions how broadcasting the voice of authentic participants, learning disabled young people in this case, makes a particularly strong impact on other young people, and their ability to empathise: "Yeah, because, one time on the radio...of how someone (a learning disabled young person) was bullied in school and it was very, like, sad. So it made me, it made like everyone think, like, not even just me, like, it was very emotional and deep", girl aged 14, Organisation 1, UK

Summarising the quotes from the UK participants above, these show perceived improvements in communication skills, thinking, motivation and confidence. They also demonstrate how young people consider they have developed workplace competencies and their voice in the community.

3.2. Qualitative Investigation in Portugal

The evaluation conducted by partners in Porto (Portugal) was of a smaller scale, but used the same focus group and interview methodology as the UK. The sample included 8 young people and 4 support actors. Like the UK, support actors took part in a focus group and young people were interviewed individually or in a focus group. These were conducted after the Portuguese team had worked on the project for 14 months.

The interviews reported many benefits of the project to young people, youth workers and the wider community. An important finding in Portugal concerned the additional benefits afforded to the family structure and extended social circle of participants. When parents and friends were invited to the youth organisations to listen to the shows, this contributed to developing a closer dialogue and relationship between young people and relatives, as well as between the youth centre and young people's relatives. Furthermore, as the RadioActive101 activities were integrated into the life of the centres, they reinforced the benefits of other activities that were being disseminated through the radio. Moreover, this also generated interest from the surrounding community, with teachers and other social actors wanting to be interviewed by participants, because they listened to the programmes and wanted to become part of them.

Youth workers reported how RadioActive101 improved the linguistic competences of young people, *e.g.* lyric writing was considered important because it allowed participants to learn new competences, previously considered boring at school. This exhibits the wider benefits of the combination of non-formal and formal perspectives of learning (Brites et al., 2014). Moreover, young people improved their journalistic competences, in so far as they were increasingly confident to make 'better' interviews, elicit 'better' answers from interviewees, talk with strangers (Brites et al., 2017), and editi their own items. Youth workers also considered that the importance to young people of having a voice was linked to recognition in their immediate and wider community.

Youth workers noted that young people had developed an important employability skill, in particular the ability to see a project through to completion. This is particularly important, because in other contexts these young people were reported to have a low tolerance to failure, difficulties in concentration and problems taking a task from beginning to end. This is also illustrated and implied in one of the comments below. In terms of benefits perceived by young people, they also mentioned benefits linked to school activities and expressing themselves within unfamiliar places and people. In keeping with youth worker feedback, they also mentioned improved motivation related to greater self-confidence, *e.g.* when they had done good work, they felt more motivated. This was a process of improvement, getting recognition and feeling confident and motivated to do more.

In terms of new digital and employability skills, participants reported that they felt they were being more creative, improving IT skills, communication and relationships (with youth workers and also with peers), promoting teamwork and being more organised. They also seemed particularly clear that they had improved their capacity of 'learning to learn', both individually and collectively. They reported that the radio had helped with communication in school, where they put into practice language learnt through the project. Consequently, they felt that they now had some advantages over their peers, being better organised and more comfortable in new situations.

Below we add some further detail and richness to these findings by *providing illustrative comments from the participants from Portugal, and explain what these are showing.* The first one shows that this young person felt they were developing technical skills and what he called 'personal' skills, which probably refers to psychosocial and/or communication skills. He also gives the strong impression that the positive influence of the project will be quite long-standing:

"helped me in that sense, because it allowed me to explore my skills at a technical and maybe even more at a personal level, so it was beneficial to me ... these are things I absorbed throughout this time on the project and that will stay with me for the rest of my life." boy aged 18, Organisation 4, Portugal

This point about the "things I absorbed" potentially remaining permanently is a strong suggestion that this young person had undergone a significant and positive long-term transformation through the project.

A key focus in Portugal was the need to improve linguistic competences, as many of the participants had low rates of achievement at school and low communicative ability in their mother tongue.

"It was really a precious help for my communication, inside and outside the project, because it allowed me to gain new skills in that area." boy aged 18, Organisation 5, Portugal

This is another powerful comment, as this young person felt that their development of communication skills transferred beyond the project.

As with the UK self-confidence featured strongly, with motivation seen by support workers as very much related to self-confidence, or as one participant said:

"At the radio, you have the freedom to fail at first, so then you can make it right", young man aged 23, Organisation 4, Portugal

Another important element across both sites was the value of being able to iteratively improve at tasks, without conceiving earlier attempts as 'failing'. This implies support for another comment made by youth workers in Portugal (see above), who mentioned that the project supported young people developing the capacity to see a task through to its end.

Related to the above, the comment below shows how performing well on a task then enhances motivation and commitment to continue with the project and perform similar tasks again.

"If we do a good job, it's obvious we are committed, therefore, we will have more motivation to continue that work", boy aged 17, Organisation 5, Portugal

Linked to the notion that RadioActive101 provides a positive alternative to formal education, was the idea of having 'choice', as one young female participant said:

"I think that, at the radio, we can choose how to do the broadcast and, at school, we have to do things on the established processes", girl aged 13, Organisation 6, Portugal

Another comment below, from a Social Worker in Portugal, makes direct reference to improvements in the self-esteem of young people. And similar to other comments from the young people, this alludes to the potential longevity of the project's impact:

"I think the project also contributes a lot to their self-esteem and in the future, in 5 or 6 years, when they look back, they will think about the things they created and, maybe, awake the passion that may have stayed with them", Social Worker in the role of Support Actor, Organisation 5, Portugal

And if the importance to young people of having a voice is linked to recognition in their immediate and wider community, participants clearly projected their unfiltered or doctored voice, identity and aspirations, in the eyes of the support team:

"They know this is an opportunity. They are aware that they have the chance to decide the themes, the things they want to say", youth centre ICT Coordinator in the role of Support Actor, Organisation 5, Portugal

Summarising the quotes from the Portuguese participants, they reported, in particular, how their experience on RadioActive101 was motivating and also had a 'deep' effect, in the sense that they thought the benefits would last and also transfer outside the project, and to school in particular. Linked to this, was the importance of choice in what to do and also having a supportive space to iteratively improve. They also felt that improvements in communications skills were particularly prominent and important.

Below we perform a synthesis and comparison of these findings across the two sites.

3.3. Synthesis and Comparison of the Approaches and Findings

For the purposes of this paper we will present a synthesis of findings from both studies and then consider the implications.

Firstly, both groups noted the importance of developing greater participant motivation, confidence (or self-efficacy) and self-esteem, which acts as a catalyst for further engagement and skills development. These findings are explicable in terms of the key literature on these dimensions. The RadioActive101 approach appears to support intrinsic and extrinsic motivation for the young people as it is commonly defined (e.g. Ryan and Deci, 2000). Intrinsic motivation arises because young people are doing something that they think is stimulating and important to them, which is also pleasurable or 'fun'. They are also expressing their own ideas and voice, in ways that lead to a tangible outcome, a show. Extrinsic motivation is supported because they are also receiving recognition from their peers, other organisations and being acknowledged by a wider public. These motivational dimensions also seemed related to developing or articulating a greater sense of confidence, or self-efficacy, similar to the ways that have been defined by Bandura (1977, 1982, 1997) in his social learning theory. Following this theory there was evidence from both sites that the young people developed a personal judgement that they could perform the radio production task competently, critically, creatively, and continuously, even when faced with challenges. This was probably helped through being involved in producing content that is original, of good quality and recognised by peers, other members of their organisations and the wider public. Similarly, these developments in self-efficacy linked to positive performance on various tasks, seemed also linked to a broader development in self-esteem (Smith and Mackie, 2007), where the young people also developed a greater sense of self-worth.

In other words, RadioActive101 is not just an effective educational approach, but also a positive psychosocial intervention, in terms of confidence, self-efficacy (Bandura, 1977, 1982, 1997) and also, more broadly, greater self-esteem (Smith and Mackie, 2007). Whilst improvements in the non-formal learning of contemporary skills leading to potentially greater employability was expected, the prominence of the reported psychosocial improvements within individuals and groups alongside broader organisational and social improvements was particularly important.

Secondly, these two national groups reported developments in improved communication and literacy skills linked to a greater confidence and propensity to use their voices, with this, in turn, leading to more competent, confident and coherent group activity. Then, building on these improved communicative, digital and media literacy competences, the youth organisations in particular seemed to, as a 'unit', become better organised and draw greater attention to their activities.

Thirdly, the groups noted that RadioActive101 was also a social and/or cultural intervention, in the sense that it produces positive changes and impacts at broader social and cultural levels beyond the organisations in which it is used, *e.g.* putting organisations on the cultural map, attracting attention and involvement from external agencies, and increasing very pragmatic dimensions – such as the capacity to attract further funding (that has happened in the UK and Portugal).

A difference noted between these groups was that the Portuguese young people underlined the benefits of exploiting family structure, and other school and social connections, and related to this, engaging an audience that is perceived as an 'outer circle' of potential participants. This emphasis was not absent in the UK, but there seemed a greater emphasis in the UK on individual, group and organisational activity and development. Noting this going forward, both contexts could learn from one another. The UK could complement their current 'personality' with a more outward looking and 'building social capital' dimension, whereas PT could complement their current 'personality' with a greater emphasis on the 'stories and psychology' of their young people. This would arguably create an elaborated 'personality' and reach for both.

It is also important that these different emphases are probably a reflection of the experts facilitating each team - media professionals and journalism academics in Portugal and applied psychology, music performance and education academics in the UK. A further difference was that, whilst the amount of frequency of shows was similar for both contexts, the UK site produced virtually the same amount of shows (33 UK, 32 Portugal) but with just over twice as many participants (UK 163, Portugal 78). This explains why the UK had nearly twice the amount of total preparation time compared with Portugal (UK 987 hrs, Portugal 560 hrs), as it takes more time for new young people to produce shows. Finally, Portugal achieved approximately twice the number of web-page views compared with the UK (UK 7,652, Portugal 15,788), which reflects their media and journalistic emphases.

The qualitative evaluations described above were particularly valuable because they allowed us to identify the types of skills and dimensions that were developed within the radio space. They also showed that the support actors perhaps had a more sophisticated oversight of these developments, whereas the young people tended to be more 'on task', motivated by the 'buzz' of the actual activities, although also usually reflectively aware of what they had learned.

To develop this aspect, having identified the skills in play, we decided to develop a more concrete recognition system, that would make transparent to the young people what skills they were 'aiming for' and whether these had been developed. Therefore a recognition system based on the EU Key Competences⁶ for Lifelong Learning was developed (see Ravenscroft et al., 2015b), that accommodated the competences that we had seen developed, and also provides a more ambitious taxonomy of skills which would further formalise and recognise the non-formal learning that occurs.

3.4 Recognition of Skills and EU Key Competences for Lifelong Learning

The European Commission's Key Competences for Lifelong Learning (OJEU, 2006) covers skills 'seen as widely relevant' in promoting the life chances of young people in a knowledge-based society (Pepper, 2011).

⁶ Since the work reported in this article was completed, the EU has proposed refining the framework for key competences (on 17/1/18), and ongoing work is considering this, see "Commission Staff Working Document on Key Competences for Lifelong Learning", Brussels, EU, 2018.

RadioActive101 linked these Competences to 39 digital badges that recognised young people's achievement and skills acquisition in three grouped areas: Journalistic, Technical and Organisation (Ravenscroft et al., 2015b). Created in 2011 by Mozilla, Digital Badges acknowledge learning in formal, non-formal and online settings (Open Badges, 2018).

By mapping a framework of radio-based learning activities and practices to six of the Key Competences (communication in mother tongue; digital competence; learning to learn; social and civic competences; sense of initiative and entrepreneurship and cultural awareness and expression), the Badge Schema was created to recognise knowledge and skills acquisition at three levels of progression (Bronze, Silver and Gold) across thirteen awards. When radio production starts, appropriate badges are negotiated with participants, in keeping with our approach of sharing decision-making responsibilities referenced earlier. And at the end, completed Digital Badges are awarded to those who demonstrate achievement in meeting the specifications for a particular award, linking the learning that takes place to the relevant Key Competence.

This Digital Badge Schema was developed and implemented four months before the end of the funded project. However, the Schema's acceptance and adoption differed across the two contexts. With digital badges still a relatively new concept for young people at the time (Gibson et al., 2015) there was an uncertainty about their use or value (Davis and Singh, 2015). Addressing this, youth workers in the UK spent time explaining their potential value to participants, finding similarities with Glover (2013) in that take-up was partially linked to the credibility of the issuer. Therefore, incorporating a 'sign-off' from a Senior member of a University carried legitimacy and validity for participants, with 66 Badges (65 at Bronze and 1 at Silver) awarded to 23 young people.

The Digital Badge Schema was implemented in Portugal at the same time as in the UK, with 3 badges awarded to three participants. In Portugal Digital Badges and the Moodle delivery system were problematic. Firstly, young people rejected Moodle, with its strong connotations of school work and formal assessment, and secondly the learning facilitators felt badges lacked the "official certification" that employers value. Here, participant excitement regarding producing their own shows took priority over badge recognition, despite facilitators attempting numerous engagement strategies. This is insightful vis-a-vis our earlier discussion around extrinsic motivation (Ryan and Deci, 2000). In Portugal, a 'softer' socio-cultural form of extrinsic motivation, through the recognition of producing and performing a show, seemed more attractive than the 'hard' reward of a Badge through Moodle, that was hindered by negative association with school.

4. Discussion: Implications and Ongoing Work

Considering the significant and sustained implementation of RadioActive101, across seven organisations and two Countries – the UK and Portugal, along with the insightful and positive evaluation findings, we can make the following points. Firstly, our participatory radio approach to engage, and develop the non-formal learning and employability skills of socially excluded young people can be *transferable across countries and organisational contexts*, as it has been applied in two countries and seven contexts, where it operates as a complex intervention. Secondly, our approach supports the *simultaneous development* of digital and employability skills combined with psychosocial improvements in dimensions like confidence, self-esteem (Bandura, 1977, 1982, 1997) and self-efficacy (Smith and Mackie, 2007). Further work will explore this relationship, but we have shown that socially excluded young people participating in RadioActive101 benefit significantly from activities that 'afford them respect and make them feel better as people'. Thirdly, in addition to developing individuals and organisations, the RadioActive101 approach catalyses *the development of connections, networks and presence* beyond the directly involved organisations, allowing participants to use *their voices* to put themselves on a *broader social and cultural map*.

We have been reflecting on what aspects account for these positive outcomes. A key aspect of RadioActive101 is that the 'buzz', excitement and 'rhythm' of participatory radio and its positive nonformal learning practices creates sustained engagement amongst socially excluded young people. This occurs because the whole space of radio is quite naturally expansive in line with the competency development of young people. For example, young people are initially motivated by the idea of producing their own radio shows, so they learn the basic journalistic, technical and vocational skills to prepare, market and broadcast a show. After listening to their initial shows, that usually take about one month to prepare, they often want to extend a theme or improve their next show through a spirit of "let's do it better". Then, as they begin to master the essential production practices, they can move on to more sophisticated dialogue concepts, such as the necessity to present balanced opinions and understand concepts like 'counter narratives'. In other words, the young people first become empowered to express their voice through radio, and then seem to develop more creative and critical capacities through exercising this voice within the structure of participatory radio.

4.1. Critique and further work: Limitations and facilitation

It was important that the *digital badge recognition system was received very differently by the two contexts*, requiring further consideration of this aspect. We need to consider whether more formal recognition and even loose 'measurement' can actually de-motivate young people with negative experiences of school, whilst also considering the value of accreditation that can be concretely articulated to employers. Hence, currently, the Badges Schema remains optional for participants and organisations, and its adoption, or not, is something that is carefully discussed in each participant context.

The potential differential influence of the facilitators in each national context was also insightful. In the UK, these facilitators were a combination of psychologists, music and media practitioners and youth workers – and the shows seemed to reflect this emphasis, demonstrating a deeper interpretation of the lives and lived experiences of these young people. In contrast the Portuguese facilitators were principally journalists and media professionals, which may account for a more outward looking and 'building social capital' approach, with greater emphasis on expanding networks and broadcasting local events. Put simply, the UK team seemed to emphasise 'looking inwards and at life more deeply', whereas the Portuguese team seemed to emphasise 'reaching outwards and connecting'. Future work will consider these as two explicit yet complementary and interrelated dimensions that can be useful levers in developing and delivering future co-production. And similarly, the importance of the nature and form of facilitation will be considered more carefully going forward, as this could be an important variable in supporting the development of young people along certain lines, when this is desirable.

5. Conclusions

This article has described an original and innovative approach to engaging socially excluded young people in non-formal learning, through exploiting the whole performative space of participatory internet radio. This is conceived as process of complex intervention involving participatory action research methods linked to the work of Dewey and Freire. Within this intervention space, a new recognition scheme has been developed that links the participatory radio activities to the EU Key Competences for Lifelong Learning, although this scheme was adopted differently in the two contexts, being popular in the UK but less so in Portugal. This research and development is important because the socially excluded young people that have been included in, and engaged by, this learning intervention are notoriously difficult to engage in more traditional educational organisations and pathways. In contrast, our RadioActive101 approach has worked successfully across two countries, the UK and Portugal, and across seven organisational contexts. In these contexts it has included and engaged a total of 233 socially excluded young people through seven partner organisations, demonstrating that the approach is transferable. Our evaluations also demonstrated the importance of considering non-formal learning of digital and employability skills alongside the development of psychosocial dimensions such as confidence, self-efficacy and self-esteem of young people. A corollary of this thinking, especially during this time in the EU, where young people face challenges in gaining employment and reacting to uncertain and worrying economic situations, is that we must embrace how learning and psychosocial development need to combine to promote inclusion in meaningful education.

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