The Influence of Participation in Sedupe Se Sekolong (SSS) Educational Radio Programme on Academic Achievement

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Abstract
The purpose of this study is to investigate the influence of participation in the South African Broadcasting Corporation (SABC)'s Sedupe Se Sekolong (SSS) educational radio programme on academic achievement of the Grade 12 learners in the Limpopo Province of South Africa. A random sample size of 252 schools was selected from a total population of 1601 schools in three districts of Limpopo Province. Of this sample size, 126 comprising of 120 principals and 6 teachers were selected as research group which participated in the SSS radio educational programme. The other 126 were selected as control group. The Sedupe Se Sekolong School Environmental Questionnaire (SSS-SEQ), which consisted of closed and open-ended questions reflect the biographical and environmental information of the school, and it was used to collect data. The 2017 National Senior Certificate Schools Performance Report was used to collect data related Grade 12 academic achievement of the previous three consecutive years of schools. The data analysis technique used was the t-test. The results revealed no significant difference in academic achievement before and after the schools participated in SSS educational radio programme. Moreover, the results also indicated no significant difference in academic achievement between school that participated in SSS educational radio programme and those that did not. The implication of this study is that the SSS educational radio programme has no relationship with academic achievement of Grade 12 learners in the Limpopo Province of South Africa.

Keywords: Educational Programme, Academic Achievement, Radio Participation

1. Introduction

Media is commonly referring to mass communication through the use of newspapers, books, magazines, television, radio, film, Internet-enabled devices, or video games (Anderson, 2016). The uses and gratifications theory states that the audience expose themselves to media contents based on gratifications they derived from them (Okoro and Agbo, 2003). Technology, as a form of media, has dominated the world by extensive improvements in audio/visual mass media such as radio. Bahrani and Tam (2018) says that radio is not just an entertainment tools anymore, but can be used pedagogically. Radio in particular, is one of the social media that convey messages to the people of the country and has been used for educational purposes since its beginning in the early 1920s as was mentioned by (Grise, Epstein, and Lukin 1974). It has also been extensively used in India for primary, secondary and higher education purposes as well as informal learning (Berman, 2008). Radio forms part of the social media that educate, entertain and inform with the purpose of enhancing academic knowledge. According to Osharive (2015) a great number of students, are addicted to social media and as such recommended that social media should be used for educational purposes. This paper therefore seeks to take the work of Berman (2008) and Osharive (2015) further, which suggested that the use of radio deserves greater attention as a means of giving educational opportunities worldwide. It investigates if participation in radio educational programme has any relationship with academic achievement, especially of Grade 12 learners in Limpopo Province of South Africa.

2. Radio as educational Media

Audio media, which comes in a form of radio, develops effective learning, assessment and feedback strategies (Orsmond, Merry, and Reiling 2005). Thomas (2001) is of the opinion that radio is still the only medium through which educators can reach a mass audience, simultaneously and at relatively low cost. Radio has been a relatively untapped teaching resource in the United States and has promoted learning of new knowledge and several behavioural changes (Romero-Gwynn and Marchall, 1990). The paper of Zain (1994) describes a case study in which satellites were used to enhance the students' understanding and grasp of the subject at the undergraduate level. The students have been very responsive to this hands-on approach in learning. The author has observed a change in the students' attitude and eagerness towards the course and significant impact on learning. The results of Cavanaugh and Song (2014) also show that instructors had mixed feelings about the use of audio, while students tended to have positive feelings toward it. According to Ranasunya (2015) radio has been able to detain the minds of the listener with the programmes that they gratify and has effect in mother tongue among gender spectrum.

Radio offers various broadcast formats (programs, shows) that bear universal characteristic features known to all students (Zdarek, 2013). It offers such programmes as documentary interviews, advice program (phone-ins asking for advice or the host reading letters and an expert giving advice), classified (phone-ins), dating (phone-ins), commented sports match, radio play, cooking program, life-style program and DIY programs. Myers (2008) maintains that radio stations can be divided roughly into four categories, being state-controlled public radio; privately owned commercial radio; community-controlled radio and international radio. Indira Gandhi National Open University has been allotted 40 FM radio stations from which

to broadcast educational programmes for the benefit of students and general public in India **(**Chandar and Sharma, 2003)**.** These FM radio stations, helps learners seeking to gain knowledge in the areas of basic, primary, higher, and extension education. These researchers discovered that radio programming covers various subject areas by offering certified vocational courses, coaching for entrance exams, and updated information on careers and courses.

In exploring the use of audio within emerging technologies to support learning, assessment and feedback, Trimingham and Simmons (2009) discovered that audio feedback clearly has tremendous potential for improving the quality of feedback. Trimingham and Simmons then recommended that if audio feedback significantly improves the quality of feedback to students on a variety of assignments, whilst taking the same, or less, time for staff members, it should then be integrated more widely throughout higher education.

3. Radio Setbacks

Radio does not always yield intended positive results on academic achievement. The type of feedback received in the work of Morris and Chikwa (2016) also indicates that radio did not impact students' grades in the subsequent assignment. In addition, while students in Morris and Chikwa's work were broadly positive about audio feedback, they indicated a strong preference for written feedback in future assignments and it is a one-way communication medium whereby interaction with listeners is minimal. As a result, a radio programme's pace is primarily that of the broadcaster, who can find it difficult to gauge the listeners' prior knowledge and attitudes critical to learning (Berman, 2008). Wangu (2015) also discovered that most schools did not have support materials but had few radio receivers. Teachers did not have enough knowledge and skills on the use of educational radio broadcasts.

4. Radio Programming in South Africa

In South Africa, the Independent Communication Authority of South Africa (ICASA) is the official regulator of the South African broadcasting, telecommunications and postal services sectors (Independent Communication of South Africa, 2018). According to Lesame (2007) the Independent Communications Authority of South Africa Act No 13 of 2000, merges the Independent Broadcasting Authority (IBA) and the South African Telecommunications Regulatory Authority (SATRA), and is intended to regulate the communications industry. Subsection 4 of Section 3 of Chapter II of the Broadcasting Act 4 of 1999 stipulates that the broadcasting system, as a whole, must provide educational programming, (Republic of South Africa Government Gazette, 2014). Subsection 5 (a) of the act, as substituted by Section 3 of Act 64/2002 states that the programming provided by the South African broadcasting system must provide a balance of information, education and entertainment meeting the broadcasting needs.

4.1 South African Broadcasting Corporation Response to Education Programming

Radio in South Africa plays a part in educational activities through the public broadcaster, which is the South African Broadcasting Corporation (SABC), as

stipulated in Act No. 36 of Electronic Communications Act, 2005, published in the Government Gazette of 18 April 2006. Subsection 2.8 of Independent Broadcasting Authority Act 153 of 1993 as gazetted in the Independent Communications Authority of South Africa Act 13 of 2000 states that "Educational programming" means programming in any format, specifically and primarily designed to support structured educational activity. Subsection (v) of the Act further states that 60% of its educational programming must consist of South African educational programming (Independent Communications Authority of South Africa, 2000);

The SABC Editorial Policy (2017) stipulates that the SABC addresses the needs of children in its language radio services by offering programmes that cater specifically for them. The Editorial Policy also mentions that it must broadcast (1) programmes that support the curriculum-based activities of the education and training sectors and cover a wide range of subjects and fields and (2) programmes that promote public education on rural development and urban renewal, human resources development, citizens' rights and responsibilities, healthy living, innovative solutions to personal, family and community challenges, national identity, culture and heritage. Beside the above, the Editorial Policy also ensure that the radio devote adequate air time to educational programmes, and schedule them at times that are appropriate for the target audiences. It also ensure that the radio services support a culture of lifelong learning through informal knowledge-building initiatives that are relevant to their format and target audience.

In the implementation guideline, the SABC Editorial Policy of 2017 required that all Public Broadcasting Service (PBS) radios must broadcast programmes specifically in support of the primary and secondary school curricula and that the educational programme are scheduled at times that are suitable for the target audiences. It also states that all the educational programmes should have clear goals. Such goals and expected outcomes are established before the production, commissioning or acquisition of any educational programme. The implementation guideline also ensures that the SABC's educational broadcasting business unit, together with the commissioning editors and executive producers responsible, is tasked with ensuring that these outcomes are achieved through creative and innovative programming.

4.2 SABC Education

The SABC unit responsible for the implementation of educational policy in response to the Broadcasting Act, is the SABC Education. Its pay-off line is “Enriching minds, enriching lives” (SABC Education, 2018). The SABC Education is responsible to carry out the educational mandate of the SABC, which has identified six educational programmes to be implemented by all PBS radio stations. These educational programmes include Early Childhood Development, Children at Home, Formal Education, Youth Development, Adult and Human Resources Development and Public Education.

Among all these educational programmes, formal educational programmes affirm and support the development of Foundation Phase learners (ages 5-9), Intermediate Phase learners (ages 9-13) as well as that in Senior Phase. Formal educational Programme supports the implementation of the national school curriculum by providing resources

of excellent quality developed specifically to assist both teachers and learners to achieve nationally set outcomes

The SABC Education divided Formal Education into learner support and educator support programmes, which observed the following guidelines

- Enhance learning in all the learning areas of the curriculum: literacy, numeracy and life skills (Foundation Phase), languages, mathematics, social sciences, arts and culture, life orientation, natural sciences and technology (Intermediate Phase)
- Take account of learners' language needs, including the language needs of deaf learners.

4.3 SABC Education Programmes at Thobela FM

The SABC's quarterly report published in SABC Annual Report (2017) indicates that Thobela FM broadcasts four hundred and twenty (420) minutes (7 hours) of educational programming on weekly basis during the South African performance period. According to Thobela FM 2011/2012 Annual Compliance Report (2013**)** the monitoring exercise confirmed that Thobela FM broadcasts a variety of educational programmes, most of which overlap with Informal Knowledge Building programmes. The following educational programmes were identified:

"Sedibeng" broadcast weekdays between 09h00 to 11h45;
"Moswa le bokamoso" broadcast weekdays between 14h00 to 14h50;
"Molao o reng" broadcast on Sundays only between 18h00 to 19h00.

The report further mentions that in total, seven hundred and seventy (770) minutes (12 hours 50 minutes) of educational programming was monitored weekly, during the South African performance period. This complies with Clause 6.5 of its broadcasting licence. The SABC Education programmes broadcast weekdays between 21h30 to 22h00 and also between 07h00 to 09h00 on Saturdays. Its learner support, "Sedupe se Sekolong" broadcast between 05h30 and 06h00 on Mondays.

4.3.1 Sedupe Se Sekolong Education Programme

Sedupe se Sekolong (SSS) is SABC Education Programme under the Learner Support Programme of Formal Education, which is broadcast at Thobela FM every Monday between 05h30 to 06h00. The purpose of this show is to highlight the importance of school environment on academic achievement and to encourage both learners and teachers to take care and cognisance of them. The school environment factors include the type of school (boarding/non-boarding, public/private school); physical environment; qualifications of teachers, learner-teacher ratio (class size); organisation of learning activities; parents involvement and other support systems; discipline; sports and extra mural activities. These school environment factors together with the attitude of learners, teacher and principals towards them contribute towards the academic achievement and performance of the school in general.

Prior to the show of Sedupe Se Sekolong, the producer will distribute questionnaires to various schools requesting them to participate in the programme. The questionnaire consists of items that are related to school environment and comments from principals

(attitudes) towards them. When the principals return the questionnaires, the producer will record their responses in the studio. The producer will then choose a topic related to one of the subheadings of the questionnaire and post it on social media (Facebook) for public comments. The producer will also give the assistant researcher the topic to collect the views of the people on the street about the topic. The producer will also contact a guest who will lead the topic during the show. The producer will also search for research articles related to the topic in the internet, journals, reviews and books. The producer will then choose two schools to participate in the programme and inform principals of those schools on the date and time on which their school will feature in the programme.

During the show, the presenter will introduce the topic, the studio guest and the two host schools. These two schools will compete during the show in terms of their school environment and academic achievement. The studio guest will then lead the topic, followed by the vox-pops from the assistant researcher. Few Facebook messages will then be read and will be followed by the producer's reading of one or two research articles related to the topic. Studio guests will make comments from those messages, vox pops and research abstracts. The presenter will then insert the recorded clips of the questionnaire and then open lines for listeners to predict the school that will top the other in terms of academic achievement at the end of the year. Participants will predict the future outcomes based on the schools' environmental factors and previous academic achievement record. Learners and teachers of participating schools will be encouraged to call, although all listeners will be welcomed. The presenter will only allow five callers who will predict the school that will top the other. The school that receives three affirmations is declared a winner, and the presenter will award it with audio insert of applause. The studio guest will also be given a chance to state whether he/she support the winning school. The presenter will then close the show.

5. Research focus

One of the important mandates by the SABC Editorial Policy is research of its programmes, which is one of the motivations that gave this study its significance (SABC Editorial Policy, 2017). The SABC is required to evaluate the impact of its educational programmes continually. Research is done to assess audience needs and to evaluate the effectiveness of the programmes. This includes audience research (e.g. to establish people's needs) and formative and summative research which enables understanding of the contribution of programming to audiences' development. This study suggests that the schools that participated in this programme may somehow get motivated and be inspired. In so doing, their handling of their school environment may improve while on the other hand they may be encouraged or discouraged by winning or losing in the Sedupe Se Sekolong education programme, which will in turn affect their academic achievement.

The research sought to answer the following questions:

5.1 Is there a significant difference in academic achieves before and after the schools participated in radio's education programme?

5.2 Is there a significant difference in academic achievement between schools that participated in radio education programme and those that did not?

The above research questions lead to the following hypotheses

H02 There is no significant difference in academic achieve before and after the schools participated in radio's education programme.
HI2 There is a significant in academic achieve before and after the schools participated in radio's education programme

H01 There is no significant difference in academic achievement between school that participated in radio education programme and those that did not.
HI1 There is a significant difference academic achievement between school that participated in radio education programme and those that did not.

6. Methods

The sample consisted of 252 high schools selected from the population of 1601 high schools from three District Areas of the Limpopo Province. A sample size of 126 schools were selected as research group while the other 126 schools were selected as control group. In the experimental group, the sample selected for the District were Capricorn (n=64) Waterberg (n=10) Sekhukhune (n=39) and Mopane (n=13). In the control group the sample selected were Capricorn (n=63) Waterberg (n=10) Sekhukhune (n=39) and Mopane (n=14). From questionnaire, 120 principals and 6 teachers participated in filling in the questionnaire. The control group were not given questionnaire as they were randomly selected from the Limpopo Department of Education School List of 2017. The schools that participated were public schools that had written the matriculation examination of the South African Certification Council the previous year. (See Table 1).

Table 1. Sample of schools from the Limpopo Province

Name of District	No of school participated		Total
	Experimental	Control	
Capricorn	64	63	127
Waterberg	10	10	20
Sekhukhune	39	39	78
Mopane	13	14	27
TOTAL	126	126	252

6.1 School Environmental Questionnaire

The study used the Sedupe Se Sekolong School Environmental Questionnaire (SSS-SEQ), which was adopted from the School Environmental Questionnaire used by Maphoso and Mahlo (2014). Section 1 of the questionnaire established the name of the school, the circuit, district, municipality and village, name of principal and contact detail. It also established the title of the participant, whether or not the school was boarding and also whether it is a public or private school. It also required the participant to state the number of learners, number of teachers and the results the school obtained in matric the previous year; qualifications of teachers and the school starting and closing time. Table 2 Section 1 of the School Environmental Questionnaire indicates the Section A which gives biographical information of the school.

Table 2. Section A of the Sedupe Se Sekolong School Environmental Questionnaire (SSS-SEQ)

SEDUPE SE'SKOLONG SCHOOL ENVIRONMENTAL QUESTIONNAIRE

SECTION A

1. Biographical Information

NAME OF SCHOOL: ..... Circuit .....

District: .....

Local Municipality: ..... Village: .....

Principal Name: ..... Contact: .....

[MARK WITH **X** IN APPROPRIATE COLUMN]

1. Who are you?	Teacher	Principal	SGB Member	Learner

2. Type of school

Boarding School	Non-Boarding School

Public School	**Private School**

3. Number. Of learners		**4. No. of Teachers**		**5. Previous % results**	Passed	Failed
6. Qualifications of Teachers	**Matric**	**M+3 years**	**Hons**	**Masters**	**PhD**	
Write number of teachers						

School's Starting Time: ..... School's Time Off: .....

According to Maphoso and Mahlo (2014) the questionnaires were forwarded to academics in the field of Research and Educational Psychology in the Faculty of Humanities of the University Limpopo for evaluation, who confirmed that the contents of the questionnaire seemed to be relevant, thereby confirming the content validity of the measuring instrument. The two researchers go further to say that educators and research officials confirmed that the questionnaire could measure the environment of the school

6.1 Schools Performance Report

To get the 2015, 2016, and 2017 Grade 12 results this study used The 2017 National Senior Certificate Schools Performance Report from the Republic of South Africa's Department of Basic Education (Department of Basic Education, 2017). This report also helped in verifying the results given by the school in the School Environmental Questionnaire. The information contains the district name, the EMIS number, centre number, centre name (name of school), quintile number; number of learners who progressed, number of learners who wrote examination, number of learners who achieved (passed) and percentage number of learners who passed.

7. Result

A paired sample t-test was conducted to assess the impact of the participation in the SSS educational radio programme on academic achievement. There is no significant difference in academic achievement between 2015 participation in SSS educational radio programme (M=60.41, SD=20.370) and 2016 participation in SSS educational radio programme (M=54.98, SD=23.235, P=069). The null hypothesis is not rejected. These results therefore indicate that there is no significant difference in academic achieve before and after the schools participated in 2016 SSS educational radio programme.

Table 3 Participation in the SSS on academic achievement for 2015 and 2016

	N	Mean	SD	P-value
2015 Results	49	60.41	20.370	.069
2016 Results	49	54.98	23.235	

A paired sample t-test was also conducted to assess the impact of the participation in the SSS educational radio programme on academic achievement. There is no significant difference in academic achievement between 2016 participation in SSS educational radio programme (M=59.89, SD=20.619) and 2017 participation in SSS Programme (M=62.82, SD=19.655, P=.260). The null hypothesis is not rejected. These results therefore indicate that there is no significant difference in academic achieve before and after the schools participated in 2017 SSS educational radio programme.

Table 4. Participation in the SSS on academic achievement for 2016 and 2017

	N	Mean	SD	P-value
2016 Results	72	59.89	20.619	.260
2017 Results	72	62.82	19.655	

An independent sample t-test was used to determine if there was a significant difference in academic achievement between schools that participated in SSS educational radio programme and those that did not participate.

The first independent sample t-test compares the significant difference between 2016 groups that participated in SSS educational radio programme and the group that did not. It indicates that there is no significant difference in score for Experimental Group 1 (M=55.88, SD=23.862) and Control Group (M=54.42, SD=21.445, p=.740). The null hypothesis is not rejected. This means that there is no significant difference in academic achievement between 2016 schools that participated in SSS educational radio programme and those that did not.

Table 5. Academic Achievement of 2016 SSS Participants and Control Groups

		N	Mean	SD	P-value
2016 Groups	SSS Participants 1	50	55.88	23.862	.740
	Control 1	50	54.42	21.445	

The second independent sample t-test also compares the significant difference between 2017 groups that participated in SSS educational radio programme and the group that did not. It indicates that there is also no significant difference in score for Experimental Group 1 (M=62.82, SD=19.655) and Control Group (M=62.07, SD=22.142, p=.823). The null hypothesis is not rejected. This means that there is no significant difference in academic achievement between 2017 schools that participated in SSS educational radio programme and those that did not.

Table 5. Academic Achievement of 2017 SSS Participants and Control Groups

		N	Mean	SD	P-value
	SSS Participants 2	72	62.82	19.655	.823
	Control 2	76	62.07	22.142	

Finally, the independent sample t-test compares the overall significant difference between all groups (2016 and 2017) that participated in the SSS educational radio programme and all control groups that did not. It indicates that there is also no significant difference in score for Experimental Group 1 (M=60.88, SD=20.474) and Control Group (M=60.07, SD=20.657, p=.758). The null hypothesis is not rejected. This means that there is no significant difference in academic achievement between schools that participated in SSS educational radio programme and those that did not.

Table 5. Overall Academic Achievement of 2016 and 2017 SSS Participants and Control Groups

		N	Mean	SD	P-value
2016 Results	All SSS Participants	118	60.88	20.474	.758
	All Control	123	60.07	20.657	

These findings differ with those of Orsmond, *et al* (2005); Romero-Gwynn and Marchall (1990); Zain (1994); Ranasunya (2015); and (Ranasuriya, 2015) who discovered relationship between radio and academic achievement. It however concur with those of Oladunjoye; Oyedele; and Maman (2017); Morris and Chikwa (2016); Wangu (2015); and (Berman, 2008) who also did not find some evidence of radio positive influence on academic achievement.

8. Conclusion

This study found no statistical significance difference in academic achievement before and after participation in SSS educational radio programme both in 2016 and 2017. It also did not found any statistical significant difference in academic performance between school that participated in SSS educational radio programme in 2016 and 2017 individually and those that did not (also individually). The overall results also indicate that there is no statistical significant difference between the school that participated in SSS radio programme and those that did not. The implication of this study is that participation in the SSS radio programme does not have relationship with academic achievement. Further research can look into how then do educational programmes help not only in direct academic achievement of grade 12 learners, but on general school performance as the SABC Education claim that its programmes are aimed at enriching minds and enriching lives.

9. References

Anderson, J. (2016). The Impact of Media Use and Screen Time on Children, Adolescents, and Families. A*merican College of Pediatricians, 27, (5-22)*

Bahrani, T & Tam, S.S. (2018). Technology and Language Learning: Exposure to TV and Radio News and Speaking Proficiency. *An open-access semi-annual peer-reviewed international electronic journal of literary, language and cultural studies of the Department of English of the Ateneo de Manila University, Philippines*. From https://journals.ateneo.edu/index.php/kk/article/view/KK2011.01707. Accessed 31 July 2018.

Berman, S.D. (2008). Technical Report 62. The Return of Educational Radio? *The International Review of Research in Open and Distributed Learning* l 9 (2).

Broadcasting Act 4 of 1999. South African Government. From https://www.gov.za/sites/www. gov.za/files/a4-99.pdf. Accessed 31 July 2018.

Cavanaugh J. & Song, L (2014). Audio Feedback versus Written Feedback: Instructors' and Students' Perspectives *MERLOT Journal of Online Learning and Teaching* 10 (1).

Chandar, U, & Sharma,, R (2003). Bridges to Effective Learning Through Radio. *Indira Gandhi National Open University India* 4 (1).

Department of Basic Education (2017). The 2017 National Senior Certificate Schools Performance Report, Republic of South Africa. From: https://www.education.gov.za /Resources/Reports.aspx. Accessed 26 March 2017.

Grise, P.J., Epstein, K.L. & Lukin, T.G. (1974). Educational Radio: A Review of the Literature. Florida State University, Tallahassee. *Center for Educational Technology, Florida State University. Tallahassee, Florida*.

Independent Broadcasting Authority (1993). Independent Broadcasting Authority Act 153 of 1993.

Independent Communication of South Africa (2018). From https://www.icasa.org.za/. Accessed 20 March 2018.

Independent Communications Authority of South Africa Act, 2000 No. 13 of 2000 Lesame, Z. (2007). The New Independent Communications Authority of South Africa: Its Challenges and Implications for Telecommunications Liberalisation in the Country, *Communication*, *26(2), 28-36.*

Maphoso L.S.T. & Mahlo, D. (2014).The Influence of Parental Involvement on Academic Achievement in Boarding and Non-Boarding Schools. Mediterranean Journal of Social Sciences. 5(2) 155-163.

Morris C.& Chikwa, G (2016). Audio versus written feedback: Exploring learners' preference and the impact of feedback format on students' academic performance. *SAGE Journals, 17(2).*

Myers, M (2008). Radio and Development in Africa: A Concept Paper : A Concept Paper prepared for the *International Development Research Centre (IDRC) of Canada. 2008.*

Okoro, N. & Agbo H. 2003. *Writing for the media society*. Nsukka: Prize Publishers Orsmond, P, Merry, S. and Reiling, K. (2005). Biology students' utilisation of tutors formative feedback: a qualitative interview study. *Assessment and Evaluation in Higher Education, 4 (30), 369-386*.

Osharive, P. (2015). Social Media and Academic Performance of Students. A paper presented at the Conference: *Final Year Project Work at University of Lagos, 2014*.

Ranasuriya D (2015). Effects of Radio and Television Media on Language. *Journal of Mass Communicat Journalism 5(265).*

Republic of South Africa, Government Gazette (2014). Act No. 1 of 2014 *Electronic Communications Amendment Act,* (2014). Vol. 586 Cape Town 7 April 2014 No. 37536.

Romero-Gwynn, E. & Marshall, M.K. (1990). Radio: Untapped Teaching Tool. *Journal of Extension, Spring 1990, 28(1).* From http://www.joe.org/joe/1990spring/a1.html.

SABC Annual Report (2017). Celebrating 80 years of Democracy. From: http://www.sabc.co.za/sabc/wp-content/uploads/docs/annual-reports/SABC+AR+2016-17.pdf. Accessed: 21 March 2018.

SABC Education (2018). SABC Education launches Virtual Academy. From http://www.sabceducation.co.za/media-office/3731- Accessed 21 March 2018**.**

SABC Education (2018). SABC Education Key to Success Campaign. From https://iono.fm/c/3253. Accessed 31 July 2018.

South African Broadcasting Corporation (2017). The SABC Editorial Policy Review (2017).

Thobela FM 2011/2012 Annual Compliance Report (2013). Unpublished Report. From: www.icasa.org.za/thobela-fm-2011-2012-annual-compliance-report Accessed: 21 March 2018

Thomas, J. (2001). Using Community Radio for Non-formal Education. Vancouver, BC: Commonwealth of Learning. http://www.col.org/colweb/site/pid/3137

Trimingham, R., & Simmons, P. (2009). Using audio technology for student feedback. *In Proceedings of the 11th International Conference on Engineering and Product Design Education EPDE09, 187-192.*

Wangu, W.C. (2015). School Based Factors That Influence The Use Of Radio Educational Broadcasts In Classroom Learning In Westlands Sub-County Nairobi County. *Unpublished Masters Dessertation,* University of Nairobi.

Zdarek, K.(2013). Radio role-play – the use of a simulated radio studio in TEF*L. Scenario, 7(1),24-39.*

Zain, A.F.M. (1994). In-Class Demonstration Using Amateur Radio Satellites for the Teaching of Communications Engineering At the Universiti Kebangsaan Malaysia. *Browse Journals & Magazines, 37(1), 107–110.*

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