



CURRENT PRACTICE & CHALLENGE OF REVISED TELEVISION PROGRAM INSTRUCTION

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AUTHOR'S CONTRIBUTION

Lemma Tadesse has performed the methodology, literature review, result interpretation and validation, formal analysis, and investigation, data collection, writing original draft preparation, funding acquisition and prepared the manuscript text and agreed to the published version of the manuscript

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ABSTRACT

The objective of this study was to assess the current status of the newly revised television program instruction (TVPI) and highlight the attitudes of teachers and factors affecting its practical implementation in Arbaminch town secondary and preparatory School Gamo zone Ethiopia. To accomplish the objective, the study employed a descriptive-survey research design. There were 24 teachers who took part in the survey, which account 20% of total sample frame, using simple random sampling techniques (Lottery system). While, the nonprobability sampling, i.e. purposive sampling technique was used to select both the town and Schools. The study used a self-structured questionnaire (for quantitative) and a semi-structured guide questions (for qualitative) to collect the necessary data regarding the issue. The analysis of the quantitative data was carried out by using percentages, triangulated with the data with interview. The study found out that, the strengths of the newly revised television program are highly supported by the teachers and school administration to perform their roles while shortage of new television programs are extremely affecting television program instruction among many factors in the study area. From the results of the finding, it is possible to conclude that, implementation of television program instruction for instruction in the study area is moderate. Thus, based on the findings of the study, it is recommended that, the concerned body need to provide material and technical support to both teachers and principals in order to improve status of PTVP implementation in the study area.

Keywords: Challenge; instruction; plasma television; practices; utilization.

1. BACKGROUND OF THE STUDY

Video sharing platforms, with computer technology, catalyzes the emergence of audio-visual learning aids now, becomes a common practice for teachers to use audio-visual aids in delivery of various subjects [1]. And established appropriate audio-visual learning aids optimize learning experiences by providing sensory stimulations [2]. Animation and information presented onscreen provided a different learning experience

from printed text which was beneficial to development of critical thinking [3]. Students reflected that they were more engaged in such learning mode [4]. Television is material with both audio and visual presentation to support teaching and learning particularly in improving comprehension and retention [5].

[6] also resonated with the use of effective learning materials including audio-visual aids in enhancing

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teaching and learning, and visual presentation helped differentiating primary and secondary information sources in approaching questions requiring higher thinking skill. For the same reason, audio-visual aids were advocated for the teaching [7]. Having investigated the use of audio-visual, revealed preference of quality audio-visual aids for effective learning [8]. When television is used for educational purposes; it is called Educational Television (ETV) (Webster's new world college dictionary). ETV Program means the television program prepared for education. In broader view, ETV denotes any television used for education of community [7].

In the history of Ethiopian education, the first television lesson was started in October, 1965 E.C. in Addis Ababa and its surrounding government schools. Then after, it was extended in 1966 to other private and government schools [9]. However, at present, the Ethiopian education policy has given due attention to the utilization of this instructional technology. Accordingly, the educational media agency launched a new educational television program for secondary schools across the country since September 2004. It has been transmitting English, Mathematics, Physics, Chemistry, Biology and Civic Education for grades (9-12). The total transmission of this satellite TV instruction lasts for about 40 minutes; out of which 30 minutes are used for lesson transmission, whereas five minutes are used for the introduction of the day lesson while the rest five minutes is used for the summary by the classroom teacher.

According to Joshy, R et al. [10], the main aim of this project was reaching millions of students scattered mostly in rural areas. They also added that, the project was aimed at alleviating the lack of enough skilled teachers, inadequate infrastructure and overcrowded classroom instruction in Ethiopia's educational system. In line with this, Temtim and Rogers (2008) stated that, the Ethiopian government introduced plasma mode of education to all high schools of the country to overcome the problem of qualified teachers in the remote villages where qualified teachers are not willing to work. They also added that, the government introduced it to reduce serious bottleneck of the country's educational services such as shortage of teachers, schools and other educational logistics.

Regarding this, Solomon [9] also stated that, the rationale behind the introduction of the new plasma based instruction seemed to address quality and equitability of education and providing opportunity of getting uniform and standard instruction for all secondary schools of the nation. Later in 2011 the transmission was interrupted. The main reasons behind this were the curriculum designed strictly

contradicts with the implementation of the policy [9]. That means, the planned curriculum insists the instructional process to be student centered but the amount of instructional time allocated to TV instruction is too much (30 to 35 minutes) so that students and classroom teacher do not get enough time to discuss (interact) with each other.

The second reason for interruption of TV was disappointment of Ministry of Education (MoE) on PTV learning program [10]. That means; MoE found out and cited a number of reasons for its inability to influence the learning outcomes. Some of them are: the language level is too difficult, the lesson proceeded too quickly, interaction is not possible (reduced two way communication), learning is passive, teachers have little time to discuss lesson points with their students or it has minimized the role of teachers in their classroom [11].

The third reason for the interruption of the TV broadcast was the revision of student text book. Towards this, MoE [12] stated that to improve quality of education, curriculum will be revised every five years so that it becomes relevant to the child's experience and environment; it responds to parental expectations and demands; and at the same time prepares students not for today's world but for a society that is aspiring to develop in the next decades [12]. In line with this in [13] MoE revised the previous plasma program to avoid the identified shortcomings of the previous PTV. One of the weaknesses of the previous TV system was teachers cannot see the lesson prior to broadcast; they are unable to integrate them in to their own programs [14]. This in turn undermines their authority. MoE concludes that the problem lies not with in the technology but with the way in which it is used. Therefore, ministry of education has modified the plasma program to correct these weaknesses. Rao [15] highlights some of the unique characteristics of educational television. He reported "Fixed schedules, scarcity of time, ephemeral, continuous, holistic, aimed at average target viewers & rich in meaning are some salient features of broadcasts television." For the same reason, audio-visual aids were also advocated for the teaching [7].

Thus MoE has made modification on the previous TVP to avoid its weaknesses. Some of the major areas of modifications include; first, the change of broadcast time from 30 minutes of PTV teacher and 10 minutes of actual classroom teacher in to 20 minutes of PTV teacher and 20 minutes of actual classroom teacher. The second area of modification is the distribution of the lesson in the form of CDs so that classroom teachers can

see it before entering to classroom and prepare themselves accordingly. Thirdly, the level of PTV integration was also changed from full semester (year) system in to specific topic or content system.

Most of the research done was focusing on the older TVP program and they are not sufficient to indicate the current situation of TVP instruction. That means, they did not address the present effort made by classroom teachers and students to perform their role as stated in plasma guide and the effort of principals in supporting the program. Currently 71.6% of secondary schools are equipped with plasma-TV and 26.1% have access to internet services. In expanding and improving plasma-TV lesson delivery, new specifications have been made. Digitized Satellite TV lessons have been piloted and preparations are under way to broadcast these digitized education programs online, by DVD and CD [14]. The general objectives of this study was to assess the current status of this newly revised plasma television program instruction in particular reference to Arbaminch town Secondary and Preparatory School. On the basis of the general objectives, the following specific objectives are stated:

- To identify the reaction of teachers towards newly revised TVP
- To explore how this newly revised TVP support teachers to perform their roles
- To show problems encountered teachers during the utilization of this newly revised TVP for instruction.

2. MATERIALS AND METHODS

Sequential explanatory mixed research design, was used i.e., Concurrent Nested Model. This model involves the collection and analysis of quantitative data first and followed by the collection and analysis of qualitative data at the second place [16]. Both primary and secondary sources of data were used in this study. The primary data sources were teachers, in Arbaminch City administration secondary and preparatory school.

The population of this study included all concerned staffs in Arbaminch secondary and preparatory schools. Specifically, teachers those their subjects broadcasted using newly revised TVP), and school principals. The ever increasing demand for research has created a need for an efficient method of determining the sample size needed to be representative of a given population. Thus, regarding sampling, the populations of this study were all teachers in Arbaminch secondary and preparatory schools, to access the targeted population, there are

121 teachers of them the researchers selected 20% (24) teachers using simple random *sampling techniques* (Lottery system) due to their homogeneity numbering each teachers code on pieces of paper until the desired sample size were fulfilled. And the structured interview was conducted with the school principals applying non probability sampling, i.e. Purposive sampling.

The researcher used non probability sampling, i.e. purposive sampling technique to select both the town and Schools. The town is selected because; the researcher had been working in the town as a teacher for the last ten years. The schools are selected because they are easy to access and the researcher has built up the trusting relationship with the teachers in the school as his closer work relationships with them. These helped the researcher to obtain relevant information easily.

Data collection instruments used was self-developed questionnaire and semi-structured interview. A pilot study of the Questionnaire was carried out at school before conducting the actual research. The purpose of the pilot study was to verify the reliability of the questionnaire. Cronbach's alpha was used to determine the reliability of the instrument and to determine the correlation of individual item to the survey total and tested as high, with an average of over 0.70. Thus, the computed reliability of the instruments was 0.95, 0.79, 0.96 and 0.94 for items prepared. Hence, the test conducted confirmed that the instruments were reliable as statistical literature recommend a test result of 0.65 (65% reliability) and above as reliable. Content validity and face validity of questionnaire was further determined by expert opinion.

After the information was gathered through questioner, and semi structured interview, the results obtained by the questioners were presented by the use of tables, frequencies and percentage. While the data gathered through semi-structured interview was used to triangulate the data gathered by questionnaire, finally the data was interpreted, tabulated and analyzed and then conclusion and recommendations was drawn.

3. RESULTS

Before discussing the data related to the basic questions, a summary of the characteristics of the subjects was presented. Four biographical variables were selected on the basis of their potential to influence results of this research. The biographical variables included: gender, age, years of teaching experience, and educational qualification.

Table 1. Biographical data of respondents

Variable	Frequency	Percentage
Sex:		
Male	21	88
Female	3	12
Age:		
20-30	9	36
31-40	10	42
41-50	5	21
51yrs and older		
Experience in teaching:		
1-10yrs	5	21
11-20yrs	13	54
21-30yrs	5	21
More than 31 years	1	4
Level of Education:		
Diploma		
First degree	17	71
Masters	7	29

As it can be seen from the Table 1 above, 88% and 12% of the respondents were male and female respectively. This clearly tells that the majority of teachers were male in the study area. From the total respondents, 36% were between 20-30 years, 42% were between 31 and 40 years, while 21% were between 41 and 50 years, respectively. Therefore, it is possible to conclude that there is fair distribution of teachers concerning age groups in the study area.

According to Table 1, 21% of the respondents were between one to ten years of teaching experience and about 54% of the respondents served for eleven to twenty years. Also 21% of the respondents served for twenty one to thirteen years. Whereas those served more than thirteen accounts only 4%. Therefore, it is possible to say that majority of teachers in the study area had good teaching experience. They had

relatively better and deep understanding of the teaching profession and various programs carried out in schools. Concerning educational qualification, majority of teachers which accounts 71% were first degree holder which is kept as requirement for first cycle of secondary school (grade nine and ten). Also 29% of the respondents were second degree holder which is considered as a minimum qualification to be employed as teachers for second cycle secondary school (grade eleven and twelve).

3.1 The Reaction of Teachers towards the Newly Revised TVP

The data on this issue were collected by means of 6 items and the results are presented in Table 2 and are harmonizing with data's obtained by interview.

Table 2. The reaction of teachers toward newly revised TVP

Roll No	The reaction of teachers toward this newly revised PTVP	Strongly disagree		Disagree		Agree		Strongly agree	
		F	%	F	%	F	%	F	%
1	TVP programs are helpful for enhancing classroom instruction					8	33	16	67
2	students learn more in plasma than as face-to-face	6	25	15	63	3	13		
3	There is high interest of students to learn by plasma	7	29	13	54	4	17		
4	Plasma teaching method improves student's achievement?	3	13	4	17	17	71		
5	TV programs are helpful for enhancing classroom instruction	4	17	4	17	16	66		
6	Newly revised TVP program solve the weaken of the previous one			10	41			14	58

As it is illustrated in the Table 2 above 67% of respondents respond strongly agree, as PTVP programs are helpful for enhancing classroom instruction. On the other hand majority of the respondents which account 63% respond disagree for the item students learn more in plasma than as face-to-face. Therefore, it is possible to conclude that teachers in the study area did not believe that students learn more in plasma than face-to-face. During interviews also respondents complained that the large class sizes, student back ground, computers lab availability, and class room environment did not allow students learn more in plasma than as face-to-face. More over in Table 2 responses to item 3 indicate as majority which accounts 54% of the respondents disagree with high interest of students to learn by plasma. But responses to item 4 of Table 2 shows that majority of respondents which account 71% agree as Plasma teaching method improves student's achievement. Response to item 5 & 6 shows that majorities of respondents agree with Plasma teaching method improves student's achievement. And helpful for enhancing classroom instruction and newly revised PTVP program solve weaken of the previous one.

3.2 How often does the Newly Revised TVP Support Teachers to Perform Teachers' Roles

The data on this issue were collected by means of 6 items and the results are presented in Table 3 and are harmonizing with data's obtained by interview.

Response to item 1 of Table 3 shows that majority of respondents which accounts 84% responds strongly disagree and disagree for the existence of the lesson in the form of CDs so that teachers can see it at their homes. This was also reflected during interview with school principals as there is shortage of CD disk in the school. But response to item 2 indicates that majority of the respondents which account 38% and 33% respond agree, and strongly agree as teaches in the study area believe newly revised TV giving more time for students to complete activities/exercises.

As it can be seen in Table 3 above ,the responses of item 3 indicates that only 13% of the respondents disagree for the question of flexibility that teachers demonstrate it when even needed even after the transition is over (during the tutorial class, it can be paused whenever needed for more clarification) while the majority agree and strongly agree as there is flexibility that teachers demonstrate it when even needed after the transition is over during the class, it can be paused whenever needed for more

clarification. Response to item 4 of Table 3 shows that majority of respondents which account 75% agree as being newly revised TVP is designed in a way that highly matches (fits) the content of text book. And responses to item 5 of Table 3 shows as majorities which accounts 75% of respondents agree with ability of newly revised TVP providing more freedom for teachers to interact with each other. And according response to item 6 newly revised TVP is selective in terms of content to be taught (being designed for practical contents).

3.3 Problems Encountered during the Utilization of Newly Revised Plasma TV Program

The data on this issue were collected by means of 4 items and the results are presented in Table 4 and are harmonizing with data's obtained by interview.

As it is illustrated in Table 4, item1 above, majority of the respondents which accounts 63% respond strongly agree, as there is shortage of new plasma television that take CDs. This was also reflected during interview with school principals. Moreover item 2 indicate 42% of the respondents agree and strongly agree as there is low attitude of students towards the utilization of PTV for classroom instruction. And responses to item 3 shows that 54% of the respondents said agree and 46% of the respondents said strongly agree as there is existence of large number of students in one class. Therefore, this clearly indicates that there are situations or conditions that become obstacle in the teaching and learning process using PTV in the study area.

4. DISCUSSION

To find out the reaction of teachers towards the newly revised TVP, teachers were asked to respond on the issue TVP programs are helpful for enhancing classroom instruction and majority of respondents' agree. [17] Reported as the use of video cases in education has grown very quickly in recent years, so this program should be good, if well prepared and well organized but, students should watch these programmers with positive attitude. This result implies that teachers have a more positive attitude towards the use of television for instructional purposes. Such an attitude or a belief may result from confidence in teachers, in having the knowledge about the technology. In line with this [18] reported that incorporation of audio-visual aids in teaching contributed positively to test performance of students.

Table 3. The extent to which the newly revised TV program helped teachers to perform their expected roles

Roll No	How does the newly revised TVP support teachers to perform their roles	Strongly disagree		Disagree		Agree		Strongly agree	
		F	%	F	%	F	%	F	%
1	Its accessibility (existence of the lesson in the form of CDs so that teachers can see it at their homes).	9	38	11	46	4	17		
2	Newly revised TV giving more time for students to complete activities/exercises	4	17	3	13	9	38	8	33
3	Its flexibility so that teachers demonstrate it when even needed even after the direct transition is over (during the tutorial class, it can be paused whenever needed for more clarification).			3	13	12	50	9	38
4	Being designed in a way that highly matches (fits) the content of text book					18	75	6	25
5	Its ability of providing more freedom for you and your classroom teachers to interact together	3	13	3	13	18	75		
6	Its selectivity in terms of content to be taught (being designed for practical contents)					13	54	11	46

Table 4. Problems encountered during the utilization of newly revised plasma TV program

Roll No	To what extent does the following factors affect implementation of newly revised Plasma TV Instruction	Strongly disagree		Disagree		Agree		Strongly agree	
		F	%	F	%	F	%	F	%
1	Shortage of new plasma television that take CDs					9	38	15	63
2	Low attitude of students towards the utilization of PTV for classroom instruction			4	16	10	42	10	42
3	The existence of large number of students in one class					9	54	11	46

The study also shows as there is conformity among teachers in the study area as there is no interest of students to learn by TV. But teachers believe as TV teaching method improves student's achievement. Therefore, we can conclude that there was agreement between teachers in the study area as TV programs are helpful for enhancing classroom instruction. In contrast to the above mentioned response, even though newly revised TVP program solve the weaken of the previous one, still there are factors that hinder the practical implementation of newly revised TVP program in the study area.

According to Davis K. et al. [19] Television is a new and sophisticated technology useful when properly

integrated within the educational system. The study also pointed out as newly revised PTV giving more time for students to complete activities/exercises indicating previous one is 40' for transmission while only 5' for teacher's revision but the newly revised one provided 20'each for both teacher and students. And newly revised PTV has a flexibility that teachers demonstrate it when even needed even after the transition is over (during the tutorial class, it can be paused whenever needed for more clarification but there is shortage of materials to facilitate the TV instruction in the study area. More over this study identify as teachers believe newly revised PTVP being designed in a way that highly matches (fits) the content of text book, providing more freedom for

teachers to interact with the class room and is selective in terms of content to be taught (being designed for practical contents). This is also reflected during the interview with the school principals.

Awasthi, D [20] Pointed out those shortages of materials are among the common obstacles in the use of audio-visual aids for teaching. Similarly, in this study it was found out that many factors are affecting TVP implementation in the study area. Among them students attitude, large class size, student background, computers lab availability and shortage of new TVs that take CDs are extremely affecting TVP implementation in the study area. Moreover insufficiency of trainings is highly affecting TVP implementation in the study area.

5. CONCLUSION

The main limitation to this research was related to sampling population used, because not incorporate sample from students and focus only on teachers and school principals. The study found out that, the newly revised TVP instruction is highly supported by teachers in performing their roles and even though there are factors affecting its full implementation. Therefore, it is possible to conclude that, status of newly revised TVP implementation in the study area is moderate. The findings of the study also show that, classroom teachers' has good attitude toward this program as it support and facilitate their role in the better position. This situation leads us to the conclusion that, classroom teachers' extent of performing their roles while integrating TV for instructional purpose is high.

The finding also identify as the newly revised PTVP instructions give chance for students as they perform their role in better position , performing their tasks especially at the time of broadcast and after the completion (end) of broadcast. Thus, the sum of these findings take us to the generalization that, students are performing their roles during TVP instruction is good. The strengths of the newly revised PTVP in terms of its flexibility, its accessibility, its selectivity for practical contents, its ability of providing more freedom for classroom teachers and students to interact together (20 to 25 minutes), and being designed in a way that highly matches the content of students text book are highly supporting both teachers and students to perform their roles while utilizing PTV for instructional purpose and students attitude, large class size and shortage of new TVs that take CDs are extremely affecting TVP implementation in the study area.

6. RECOMMENDATIONS

The study has clearly portrayed teachers' recognition of the potential of the television for instructional purposes and their readiness to use it. Thus, in line of the finding of this study it is seems reasonable and relevant to suggest the following recommendations.

1. It is with worth mentioning that in spite of the above comment, the television has gained great acceptance and therefore the government and other well-meaning bodies should provide necessary fund and adequate facilities to see to its proper utilization in secondary schools.
2. The concerned bodies particularly the education office in collaboration with regional and zonal education bureau should enhance teachers' knowledge, skills and commitment to use PTVP using Professional development activities such as training and workshops on the various problems that this research identified.
3. Adequate resources, suitable class room conditions, and training on how to implementing PTVP in large class size should provide for teachers with adequate guides and other instructional materials by working closely with other stakeholders.
4. External factors hindering the implementation of PVP which are not covered by this study should be identified through further research. Practical ways to overcome the obstacles should also be investigated.

CONSENT

As per international standard or university standard, respondents' written consent has been collected and preserved by the author(s).

COMPETING INTERESTS

Author has declared that no competing interests exist.

REFERENCES

1. Cheung, D. The key factors affecting students' individual interest in school science lessons. *International Journal of Science Education*. 2017;40(1):1–23.
2. Rao TS, Jyoti AAV. Utilization of audio-visual aids at Government Primary School in Vishakhapattnan District, Andhra Pradesh. *International Journal of Multidisciplinary Educational Research*. 2012;1(2):311–318.
3. Shah I, Khan M. Impact of multimedia-aided teaching on students' academic achievement

- and attitude at elementary level. US-China Education Review A. 2015;5(5):349- 360.
4. Malik S, Agarwal A. Use of multimedia as a new educational technology tool: A Study. International Journal of Information and Education Technology. 2012;2(5):468–471.
 5. Ashaver D, Igyuve MS. The use of audio-visual materials in teaching and learning process in College of Education Benue state, Nigeria. Journal of Research and Method of Education. 2013;6(1):44–55.
 6. Danie T, Rangis I. Effectiveness of audio-visual aids in teaching lower secondary science in a rural secondary school, Asia pacific. Journal of Educators and Education. 2018;32:91–106.
 7. De Sousa LO, Richter B, Nel C. The effect of multimedia use on the teaching and learning of Social Sciences at tertiary level: a case study. Yesterday and Today. 2017;17:1–28.
 8. Haque MS, Talukder MHK. Audio visual aids-quality use in lecture classes of undergraduate medical education in Bangladesh. Medicine Today. 2017;28(2):48– 51.
 9. Solomon A. Policy formulation, curriculum development and implementation in Ethiopia. The Book Center Addis Ababa University; 2008.
 10. Joshy R, Verspoor A. Secondary education in Ethiopia supporting growth and transformation. World Bank: Washington DC; 2012.
 11. Temtim A, Rogers C. Integration of ICT in education: The plasma mode of education in Ethiopian High Schools; 2008
 12. Federal Democratic Republic of Ethiopia. Education Sector Development Program III (ESDP-III). 2005/2006 – 2010/2011 Program Action Plan (PAP); 2005.
 13. Federal Democratic Republic of Ethiopia. Education sector development program IV. Addis Ababa: Mega Publication; 2010.
 14. Federal Democratic Republic of Ethiopia. Information communication technology. India: Laxmi publications; 2010.
 15. Rao V. Media Education. New Delhi: APH Publishing Corporation; 2010
 16. Creswell J. Research design: Qualitative, quantitative and mixed method Approaches. Thousand Oaks, California: Sage Publication; 2009
 17. Nnenna NB. Television as an instructional tool for concept analysis. World Journal of Education. 2015;5(1):124-130.
 18. Ismail ME, Othman H, Amiruddin MH, Ariffin A. The use of animation video in teaching to enhance the imagination and visualization of student in engineering drawing. IOP Conference Series: Materials Science and Engineering. 2017;2:12–23.
 19. Davis K.. Human behavior at work: A Study in Organizational Behavior (5th Ed). Columbia: University Press; 2010.
 20. Awasthi D. Utilizing audio visual aids to make learning easy and effective in primary education. International Journal of Scientific Research. 2014;3: 62–68.