

Utilisation and Benefits of Instructional Media in Teaching Social Studies Courses as Perceived by Omani Students

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Abstract

The article reports on a study that elucidated the extent of the utilisation and benefits of instructional media as perceived by Omani students. A questionnaire consisting of a list of the commonly available media at schools was deployed. Copies of the questionnaire were distributed to a sample of 970 students drawn randomly from the Muscat area in Oman. The results showed that boards, maps, tables, illustrations and graphs were the most frequent media used in the teaching of social studies courses as perceived by the students. In terms of the benefits, the results showed that the boards, maps, tables and illustrations were the most useful media. The results also revealed that there was no significant difference between the perceptions of female and male students regarding the utilisation of media. However, more female students noted that the benefits they rendered were higher. A comparative analysis between the course levels revealed that the students' perception of the utilisation and benefits of various media in the preparatory course level was higher than that of secondary course levels. The discussion of the results, in particular pertaining to the provision of the media usage for their benefit in teaching and learning for the Omani students will be discussed and highlighted.

INTRODUCTION

It is well known among educators that the educational experiences involving the learner actively participating in concrete examples are retained longer than abstract experiences. The instructional media add elements of reality by providing such concrete examples. The teaching of social studies courses has always been based on a limited knowledge base, and as a result, the utilisation of the instructional media among teachers often rely on traditional applications of technology. There is, however, a tremendous potential for technology to be fostered as a tool that can overcome the traditional isolation of the classroom setting (Braun, 1997), provide access to expensive resources (Becker & Ravitz, 1999) and improve overall productivity (Saye, 1998). To achieve the desired outcomes with the utilisation of technology, the teaching of the social studies courses must focus not only on making teachers competent at using such technology, but at the same time, promote strategies that enable the integration of technology that enhances teaching and learning.

Bolick et al., (2003) pointed to a precarious relationship between the teaching of the social studies and the utilisation of technology. They argued that "... while some educators have been fascinated by the potential of technology to enhance teaching and learning, many schools have lagged behind in assimilating technology into instruction. Others expressed doubt that technology will ever incite instructional reform in the social studies e. g. (Berson, 1996), Shaver (1999) ...". They stated that this conflict "... has led some researchers to conclude that the social studies has not appreciably changed as a result of technology e. g. (Martorella, 1997; White, 1997)...".

The instructional technology in middle and secondary schools instruction has been widely researched but many questions still remain unanswered. Research in various relevant areas is still needed. Educators are asking if technologies

will make a difference in the performance of students. At the same time, teachers are asking if there exists the best tool to assist in the course delivery. The learning environment of a classroom assisted by instructional technology is different from one without technology and the question remains regarding the benefits of technology in the classroom. If technology is available in the classroom, does that mean that students are actively engaged in learning? Would the instructional technology promote higher order thinking skills among students and facilitate the preferred inquiry based learning? The teaching and learning strategies and the curriculum are all affected by the inclusion of instructional technology and research would continue to add new information and shape to the evolution of instructional technology in the classroom

Active learning in social studies involves providing the opportunities for students to participate meaningfully by talking and listening, writing, reading and reflecting on the content, ideas, issues, and concerns of an academic subject. Unfortunately, many classrooms continue to be dominated by a single medium and this is usually the printed textbooks. This dominance prevents teachers from reaching all students; instead, it forces them to cater to those who find the texts accessible and this creates barriers for those who do not. There are further consequences. Even though students are able to access the text, there are certain learning elements that are missing. There are media readily available that are more suitable for communicating particular kinds of learning materials. Students' preferences and proclivities for certain media and tools can play an important role in deepening their engagement and enhancing their learning experiences. Collecting and maintaining a sufficiently varied assortment of traditional media that would allow us to create an optimal instructional environment for every student in a unit of curriculum would be incredibly costly, consume too much space and create nearly insurmountable logistical problems. More media is not a reasonable alternative. Teachers do not necessarily need more media but what they need more importantly is better media. Whitworth & Berson (2003) indicate that there is a need for research on the use and effectiveness of technology in social studies classrooms that would enhance social studies education. With these concerns in mind and the educational development at the Sultanate of Omani which has invested a great amount of money in the establishment of learning resources centres at schools, the current study is carried out to address the following questions:

1. To what extent are instructional media utilised in the teaching of social studies at Omani public schools?
2. To what extent are instructional media useful in the teaching social studies at the Omani public schools?
3. How does the utilisation of instructional media in the teaching of social studies at the Omani public schools vary according to:
 - a. gender
 - b. the course level (preparatory and secondary)?
4. How do the benefits of instructional media in teaching social studies at the Omani public schools vary according to:
 - a. gender
 - b. the course level (preparatory and secondary)?
5. How do the utilisation and benefits of instructional media in teaching social studies differ at the Omani public schools?

IMPORTANCE OF THE STUDY

This study is considered to be important for the following reasons:

- It helps in showing the practice of Omani teachers in the utilisation of media in the teaching of social studies.
- It helps in casting some light on the extent of benefits of instructional media.
- It helps curriculum designers, educational supervisors, policy makers and instructional designers in evaluating the current practice of instructional media.

LITERATURE REVIEW

In tandem with technological advancement, the usage of the instructional media has dramatically increased in the last two decades (Descy, 1991). According to Abu Jaber (1987), the importance of instructional media for both teachers and students cannot be overemphasised. In social studies, the use of instructional media is essential to support learning because social studies are concerned about natural and social phenomena which cannot be easily expressed without the support of graphics maps, video, pictures, etc. Curzon (1997) points out that using instructional media in social studies classrooms widens the channel of communication between teachers and their students. The instructional media allow the growth of specific learning abilities and enhance intellectual skills and motor skills. The use of charts and models enables the teacher to present and illustrate many physical phenomena and issues easily and at the same time, allows them to focus attention on the characteristics of objects.

In the computer-based instructional media, Davidson (1996) stated that the use of such media in geography lessons is imperative as it makes a valuable contribution to the quality of student learning. Such media can be used in several ways in geography lessons. *PowerPoint*, for instance, can be used to present geographical issues and data loggers for collecting weather data electronically. Recece & Walker (2001) also pointed out that it is important to use learning aids to enhance student learning experience and they stress the link between poor learning with the failure to use visual aids and similarly effective

learning to the professional use of visual aids. Molstad (1974) also found that the proper use of instructional media positively affects students' achievements. Bailey & Fox (1996) also find that computer graphics maps are the effective way of presenting spatial information and for geography courses, such maps are considered the most important tool for illustrations. Teachers need to use them effectively in the classrooms and give opportunity to pupils to learn about different types of maps starting from simple sketch maps to complex geographical information system (GIS) maps.

In terms of media involving television, Lambert & Balderstone (2000) added that televisions in the classroom are making an increasingly significant contribution to the teaching and learning of geography where pupils can learn about other cultures and develop their sense of place. They also reported that besides TVs, photographs and slides are also important sources of visual materials that help teachers to bring reality into their classroom. Such media also assist in developing students' knowledge, vocabulary, awareness and interpretation skills. Moreover, teachers can go further from just illustrating the content to exploring values, attitudes and beliefs from the media.

In terms of effectiveness, recent reviews of research indicate that instructional technology has positive effects on the learning of social studies (Diem, 2000). However, there is a need for further research to evaluate the integration of particular types of technology into social studies classrooms (Berson, 1996; Diem, 2000; Mason & Berson 2000). Such research may help in providing further evidence on the use of technology as effective learning tools and also encourage other educators to incorporate relevant technology into their instruction. At the same time, research findings would also facilitate the sharing of these endeavours with the rest of the social studies professional community. The importance of instructional technology in social studies is supported by the findings of Bennett & Pye (2003). In their study, they revealed that at least one form of computer-based instructional strategies is used on a regular basis.

Other studies have looked at the differences of usage of media between course levels i.e., between elementary classrooms and secondary school classrooms. Descy (1992) for instance, revealed there are differences observed when elementary school teachers use fewer media in their teaching and when they do, they tend to use less complex formats such as bulletin boards, posters and pictures from books and magazines.

METHODOLOGY

The random sample of the study consisted of students in eight schools both at the preparatory and secondary school levels. The total samples involved were 970 students and the schools were all from the Muscat area, Oman. The sample distribution is shown in Table 1.

Table 1 Distribution of the sample of the study

	Level		
Gender	Preparatory	Secondary	Total
Male	248	202	450

Female	300	220	520
Total	548	422	970

The sample students were each given a questionnaire consisting of fourteen items (on a five point Likert Scale) that represented all the available instructional media used in the class (see Appendix 1). For each of the items, the respondents were requested to indicate the extent of utilisation of the media and the benefits they received from such utilisation. This questionnaire was generated from the media manual book of the Ministry of Education, Oman. The face validity of the questionnaire was established by giving it to experts to comment on its validity. They suggested some modifications e.g., all computerised media were renamed specifically as computers. These terms included the use of many computer media such as the CD, floppy diskettes, power point presentations and Internet web sites. The reliability coefficient was calculated and the alpha Cronbach was found to be 0.89, indicating high internal consistency. The questionnaires were distributed by the researchers to students via the teachers teaching social studies in eight schools.

RESULTS AND DISCUSSION

To answer the first question of this study, the means and standard deviations of the students' responses to the questionnaire were analysed. Table 2 shows the descriptive analysis of the students' perceptions of media utilisation and the benefit of such utilisation.

Table 2 Descriptive statistics of the utilisation and benefit of each medium as perceived by students

The medium	Utilisation		Benefits	
	Mean	Std. Deviation	Mean	Std. Deviation
Boards	4.4577	0.8648	4.3478	0.9695
Maps	3.4433	1.0985	3.8122	1.1216
Globes	2.2381	1.2598	2.6883	1.4039
Models	2.6526	1.2969	3.0784	1.3637
Real objects	2.8031	1.4140	3.2167	1.4440
Photographs	2.8660	1.2560	3.1228	1.3285
Illustrations	3.2732	1.1971	3.5139	1.2506
Tables	3.4000	1.2511	3.6192	1.2680
Films	2.2381	1.4309	2.8411	1.5513
TV & video	2.3216	1.3935	2.6605	1.4873
Time line	2.5021	1.4115	2.7719	1.4780
Graphs	2.9825	1.2707	3.2446	1.3396
Transparencies	2.4670	1.4147	2.7884	1.5204
Computers	2.1072	1.5105	2.8720	1.7622
Total	2.8395	0.6884	3.1841	0.7820

It is clear from Table 2 that the boards, maps, tables, illustrations and graphs were the most frequently used media in teaching social studies as perceived by students. Globes, films and computers were least frequently used. This finding was in agreement with that of Smeltzer (1988) who indicated that teachers rely mostly on the traditional classroom

pedagogy rather than incorporate mediated instruction into their teaching. The traditional media, such as the transparencies, time line and models, were moderately used by the teachers. Jones (1983) also found that these types of traditional media were used more frequently than the newer media. In terms of benefits, Table 2 shows that boards, maps, tables and illustrations were the most useful media as viewed by the students whereas the computer, transparencies and globes were perceived to be of minimum benefits. Such a perception could be derived from the fact that most of the schools involved in the study used cheaper media and the students had become very familiar with them.

To elucidate whether there were differences in the utilisation of the media in terms of gender, the t-test comparative analysis was conducted. The results are shown in Table 3.

Table 3 Comparative analysis of gender in terms of media utilisation

GENDER	N	Mean	Std. Deviation	df	t	Sig.
male	450	2.8108	0.7416	968	-1.21	.23
female	520	2.8643	0.6385			

Table 3 indicates that there was no significant difference between the means of female and male students. This shows that female students' perceptions were similar to those of the male students regarding the utilisation of media in teaching social studies within the 0.05 confidence level. This result could be justified by the fact that both genders had been exposed to very similar instructional media.

The comparative analysis was also conducted in terms of media utilisation between the secondary schools and the preparatory schools. The result is shown in Table 4. It is evident from the above table that there was a significant difference in the utilisation of media between the preparatory and secondary schools in the teaching of social studies. In the preparatory schools, the utilisation of media was higher than that of secondary schools. This result could be attributed to the fact that in the preparatory schools, more media were needed for teaching than in secondary schools because of the nature of the students (age, mental ability, maturity). Research studies have shown that preparatory school teachers utilise instructional media more frequently than their counterparts in high schools (Dobbert, 1976; Leisner, 1978). Their findings support those of this study.

Table 4 Comparative analysis between the preparatory and secondary schools in terms of media utilisation

Type of Schools	N	Mean	Std. Deviation	df	t	Sig.
Preparatory	548	2.9078	.6979	968	3.55	.00
Secondary	422	2.7507	.6663			

The comparative analysis in terms of the benefits of the media utilisation between gender was also conducted. The results are shown in Table 5.

Table 5 Comparative analysis of gender in terms of the benefits of media utilisation

GENDER	N	Mean	Std. Deviation	df	t	Sig.
Male	449	3.0955	.8318	967	-3.30	.00
female	520	3.2607	.7284			

Table 5 shows that the female students' perceptions of the benefits of instructional media were higher than male students. This could be attributed to the researchers' observations that the female teachers at the Sultanate of Oman exerted more effort and have more concern about using instructional media in teaching than male teachers. It was observed by the researchers that the female teachers tended to prepare and use instructional media to increase students'

achievements more than male teachers. This was also clearly reflected in these results.

Table 6 illustrates the differences in the benefits of media utilisation as perceived by the students according to the types of schools. It is clear from Table 6 that there was a significant difference in the benefits of media in teaching social studies as perceived by the students. Compared to the secondary school students, the preparatory school students' perception was that the benefits of media were higher. This result could be attributed to the fact that in the preparatory schools, more media were used for teaching than in the secondary schools and the more media were used, the more the benefits derived.

Table 6 Comparative analysis between the preparatory and secondary schools in terms of the benefits of media utilisation

Type of Schools	N	Mean	Std. Deviation	df	t	Sig.
Preparatory	547	3.2463	.7694	967	2.83	.00
Secondary	422	3.1036	.7917			

To answer the fifth research question, the paired sample t- test was used to test for significance. The results are shown below in Table 7. It is clear from this table that there was a significant difference between the means of students' perceptions on the extent of the utilisation and benefits of the usage of the instructional media. This means that regardless of the use of instructional media, the students perceived higher benefits. The systematic utilisation of media in the classroom was perceived to have significantly improved the educational outcomes. This improvement could be in the form of students' achievements and savings of time on tasks. Also, it was observed from the table that the correlation between the utilisation and benefit was significant and of high value (0.70).

Table 7 Paired samples t-tests for the means of the media utilisation and corresponding benefits

Dimensions	Mean	N	Std. Deviation	Correlation	df	t	Sig.
Utilisation	2.8388	969	.6884	.70	968	-18.70	.00
benefitB	3.1841	969	.7820				

IMPLICATIONS AND RECOMMENDATIONS

With a better understanding of the utilisation of the instructional media and how the students' interact with them, teachers can reevaluate how to teach, how the students learn and how best to use the various technologies to individualise these processes. It is known that there is no single traditional instructional medium format that works for all students. Although it is possible to remove the barriers and expand the access to learning by offering contents in a variety of media, the fixed nature of speech, text and images makes it impractical and an unviable option for most educators. The flexibility of the instructional media opens new doors to diverse learners. The digital capacity to combine and transform text, speech and images leads to a more diversified palette for communication – one that can accommodate the varied strengths and weaknesses of each medium and every student. The results of this study support earlier research that found little similar patterns of usage of instructional media in the schools and, when media were used, they are generally the least complex kinds such as boards, maps, tables, illustrations and graphs.

If the public schools in Oman are to improve, it is imperative that teachers utilise instructional media in their daily teaching. The schools in Oman will not fulfil their promise of an improvement in their teaching without a rethinking process in what teaching means and how students learn. There is no way of doing that without the proper use and integration of instructional media in teaching and learning. A transformation in curricula and instructional processes may

be promoted by offering sufficient access to technology and infusing technology into the teaching of social studies courses while affording opportunities to consider the daily demands of a teacher that may present barriers to the use of technology in the classroom.

References:

- Abu-Jaber, M. (1987). A study of factors affecting the use of media in instruction at Jordanian community colleges. *International Journal of Instructional Media*, 19 (1), 23-31.
- Bailey, P. and Fox, P. (1996). Teaching and learning with maps. In Bailey, P. & Fox, P. (Eds.). *Geography Teachers' Handbook* The Geographical Association, Sheffield, United Kingdom, pp 109 – 116.
- Becker, H. J. & Ravitz, J. L. (1999). The influence of computer and Internet use of teachers' pedagogical practices and perceptions. *Journal of Research on Computing in Education*, 31(4), 356-384.
- Bennett, L. & Pye, J. (2003). Usage of instructional technology in teaching middle school social studies. *Meridian: A Middle School Computer Technologies Journal*, 6(1). [<http://www.ncsu.edu/meridian/jan99/vfieldtrip/index.html>]
- Berson, M. (1996). Effectiveness of computer technology in the social studies: A review of the literature. *Journal of Research on Computing in Education*, 28(4), 486-499.
- Bolick, C., Berson, M., Coutts, C. & W. Heinecke (2003). Technology applications in social studies teacher education: A survey of social studies methods faculty. *Contemporary Issues in Technology and Teacher Education*, 3(3).
<http://www.citejournal.org/vol3/iss3/socialstudies/article1.cfm>
- Braun, J. (1997). Past, possibilities, and potholes on the information superhighway. *Social Education*, 61(3), 49-153.
- Curzon, L. (1997). *Teaching in Further Education: An Outline of Principles and Practice*. London: CASSELL
- Davidson, J. (1996) Information technology and the geography department. In Bailey, P. & Fox, P. (Eds.). *Geography Teachers' Handbook*. The Geographical Association, Sheffield, United Kingdom, pp 249 – 260.
- Descy, D. (1992). First year elementary school teachers' utilization of instructional media. *International Journal of Instructional Media*, 19 (1), 15-21.
- Descy, D. (1991). Instructional media utilization in the classroom and its relationship to teacher burnout and student learning. *International Journal of Instructional Media*, 18 (2), 99-106.
- Diem, R. (2000). Can it make a difference? Technology and the social studies. *Theory and Research in Social Education*, 28(4), 493-501.
- Dobbert, D. (1976). Variables affecting the use of instructional media by Minnesota special educators. *Paper presented at the annual meeting of AERA, San Francisco*. (ERIC Document Reproduction Services No. ED121036).
- Jones, G. (1983). The relationship of media training and media use by student teachers and first year teachers. *Dissertation Abstract International*, 43, 3490A (University Microfilms No. 83-07713)
- Lambert, D & Balderstone, D. (2000) *Learning to Teach Geography in the Secondary School*. London and New York: Routledge Falmer.
- Liesner, J. (1978). The use of non print media in the public schools of Maryland: An exploratory study (Final report). College park, MD, SLIS. (ERIC Document Reproduction Services No. ED167083).
- Martorella, P. H. (1997). Technology and social studies or: Which way to the sleeping giant? *Theory and Research in Social Education*, 25(4), 511-514.
- Mason, C.L. & Berson, M.J. (2000). Computer mediated communication in elementary social studies methods: An examination of students' perceptions and perspectives. *Theory and Research in Social Education*, 28(4), 527-545.
- Moldstad, J. (1974). Selective review of research studies showing media effectiveness: A primer for media directors. *AV Communication Review*, 22, 387-407.

Reece, I. & Walker, S. (2001) *Teaching Training and Learning a Practical Guide.*: Business Education Publishers Limited, *Great Britain*

Saye, J.W. (1998). Creating time to develop student thinking: Team-teaching with technology. *Social Education*, 62(6), 356-362.

Shaver, J.P. (1999). Electronic technology and the future of social studies in elementary and secondary schools. *Journal of Education*, 181 (3), 13-41.

Smeltzer, D. (1988). Media utilization and the student content teaching inventory: A correlation study of community college instructors. *International Journal of Instructional Media*, 15, 222-233.

White, C.S. (1997). Citizen participation and the Internet: Prospects for civic deliberation in the information age. *The Social Studies*, 88(1), 23-28.

Whitworth, S. A. & Berson, M. J. (2003). Computer technology in the social studies: An examination of the effectiveness literature (1996-2001). *Contemporary Issues in Technology and Teacher Education* , 2(4).

<http://www.citejournal.org/vol2/iss4/socialstudies/article1.cfm>