The Existing Formats and Functions of Media Units in the Omani Higher Education

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الأنماط والوظائف الحالية لوحدات الوسائط في مؤسسات التعليم العالي العمانية

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الملخص

هدفت هذه الدراسة إلى تحديد الظروف الحالية لوحدات الوسائط في مؤسسات التعليم العالي العمانية والناتجة عن التطورات المالية والتربوية والتقنية خلال عقد التسعينات، ضمت عينة الدراسة عشرين مؤسسة، وأظهرت نتائجها أن المستجيبين يدعمون التوجه العالمي بتزايد الوعي بالانفجار التقني، ووجدت حاجة لتأسيس برامج للتطوير التعليمي، ولوحظ ارتفاع في مستوى التوظيف وأن هناك حاجة موازية لتطوير المصادر البشرية والفنية من أجل نشر التقنية، وتم عرض التوصيات لتحسين وضع هذه الوحدات.

The Existing Formats and Functions of the Media Units in the Omani Higher Education

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Abstract

This study aimed at determining the existing conditions of the Omani Higher Education Media Units resulting from the financial, administrative and technical developments during the 1990s. The sample of the study consisted of twenty organizations. The results showed that the respondents support the increases in awareness of the worldwide technology explosion and that the need to establish instructional development programs exists. An increase in staff employment level and a need to develop the human and technical resources for technology infusion were also expressed. Major recommendations were made to promote the status of the media units in higher education in Oman.

Introduction

Educational media is used as a means of facilitating the teaching and learning process. The field of ëeducational mediaí is concerned with learning through media and emphasizes the educational aspect of media applications (Percival & Ellington, 1984). A media unit is defined as: a central structure which is deployed by and within the university to provide, monitor and evaluate audio-visual media services along with academic staff development by means of human, technical and financial resources, and positive communication at national, external and internal levels (Al Musawi, 1995). Its existence is essential to enable the faculty to employ a flexible learning approach in instruction. For example, different faculty members may use different teaching-learning strategies in the classroom (Kumar, 1996).

Marzotto (1991) of Canada conducted a study, the purpose of which was to develop a profile of the conditions existing in higher education media units in Canada. He showed that in the Canadian media units:

a) the trend in budget and personnel levels of stability has been reached; b) capital equipment and new technology acquisition was the most pressing need; c) new technologies require new skills; d) some positive support was received from both administrative superiors and faculty. In addition, it was found that media centers were healthy, had a variety of names, and mostly promoted their services with brochures and pamphlets. Finally, it was found that the financial factor remains the obvious motive for most, if not all, of these relations and those Units were allowed to generate more revenue and plough back the income into the Unit. Similar Units in Oman were, however, advised to ensure a good balance between educational and commercial activities, otherwise a possible tilt should be in favor of their educational credibility (Al Musawi, 1995).

Study Rationale and Problem

This study was conducted with a view to determining the existing conditions of Omani (HE) media Units resulting from the financial, administrative and technical developments during the 1990s. During the 1990s, the Omani educational authorities became aware of the importance of media applications in education. A substantial amount of resources was directed into this aspect of education. To date, only few attempts have been made to investigate the impact of the efforts made in this direction to improve higher education. This study will

serve to find out the results of such investments in educational technology in the Omani HE and examine the impacts of the new policies and inputs into these Units. It will recommend the appropriate strategies for improving the activities of these Units in Oman. The objectives of the study are:

1. To assess the support provided by administration to these Units.
2. To investigate the Unitsí main financial, technical and administrative issues.
3. To analyze the quality of the Unitsí output.
4. To assess the training needs of the Units.

In particular, the study answers the following questions in regard to the existing status of the media Units:

1. How do Heads of the Units assess the support provided by higher administrative authorities and faculty to their Units?
2. How do Heads perceive their Unitsí existing status and development?
3. What are the serious challenges facing these Units?
4. What are the main administrative issues/problems of the Units?
5. What is the financial status and impacts on the Units?
6. What are the outputs of the Units?
7. Do the Omani media Units provide/need professional and/or instructional development skills for their staff and/or faculty members? What types of skills?

METHODOLOGY

Instrumentation

A previously designed and tried out questionnaire (Marzotto, 1991) was adapted to the Omani context to collect data for the study. Sections dealing with distance education were deleted from the questionnaire as they are not relevant to this research. Other parts were reviewed and re-written in line with the objectives of this study.

The questionnaire was pilot-tested by the researcher. Subjects used in the pilot-test are colleagues and individuals from the homogeneous group used for the study but not part of the research. They provided the researcher with their

opinions on the validity and clarity of the instrument. Modifications were made according to the reactions.

Sample

The population included twenty Units from the public and the private Omani HE institutions. Units Heads and those who administered the Units were the subjects (respondents) of this study.

Data Collection and Procedures

Thirty-two public and private institutes and colleges, and a university were identified in the Omani Higher Education. The questionnaires were mailed in January 1998. Due to some logistic/administrative impediments, another batch of the same questionnaire was repeated at the beginning of November of the same year. Twenty (62.2%) of those surveyed returned their questionnaires. The data were then analyzed to determine the existing conditions of the Omani higher education media Units resulting from the financial, educational and technical developments during the 1990s. Simple statistical analysis was adopted in the data analysis.

Findings and Results

In order to answer the research questions, the questionnaire was organized in three parts: (1) Administrative Support; (2) Budget and Services; and (3) Professional Support and Development. It comprised twenty-one items in the three parts.

1. Administrative Support

To answer the first study question: ìhow do Heads of the Units assess the support provided by the higher administrative authorities and faculty to their Units?î The results are presented in two aspects: the nature of support provided by the Administration/Faculty to the Units, and the trend in this support.

Nature of Support

Table 1 sums up Heads' responses that show the nature of support provided by the immediate supervisor, the next higher-level administrator and the faculty in general to their Units. This personal assessment mirrors Heads' opinions of how the unit is supported by the administrative authorities. Heads are fairly positive with reference to the support from higher administration and from their clients.

Table 1: Nature of Support provided by Administration/Faculty to the Units (N=20)

Supervisory Post	(1)	(2)	(3)	(4)	(5)	N/A
Immediate Supervisor	6 Units (30%)	6 Units (30%)	-	1 Unit (5%)	-	7 Units (35%)
Next Higher Administrator	8 Units (40%)	4 Units (20%)	2 Units (10%)	-	-	6 Units (30%)
Faculty	5 Units (25%)	8 Units (40%)	2 Units (10%)	-	-	5 Units (25%)

(1) Extremely supportive   (2) Moderately supportive   (3) Indifferent
(4) Moderately hostile   (5) Extremely hostile   (N/A) N/Available

Trend in Support

Heads were requested to express the trend in the support given by the immediate supervisor, next higher-level administrator and the faculty by selecting the scale provided. Table 2 gives details of the responses. The trend results substantiate the positive responses of the nature of the support. It is important to note that none of the responses reflect a trace of deterioration in the support, which is a positive sign of development.

Table 2: Trend in Support provided by Administration/Faculty to the Units (N=20)

Supervisory Post	(1)	(2)	(3)	(4)	(5)	N/A
Immediate Supervisor	5 Units (25%)	4 Units (20%)	4 Units (20%)	-	-	7 Units (35%)
Next Higher Administrator	4 Units (20%)	7 Units (35%)	3 Units (15%)	-	-	6 Units (30%)
Faculty	2 Units (10%)	7 Units (35%)	6 Units (30%)	-	-	5 Units (25%)

(1) Extremely supportive   (2) Moderately supportive   (3) Indifferent
(4) Moderately hostile   (5) Extremely hostile   (N/A) N/Available

The growing number of the Units' staff confirms the administrative support. In response to a question about the number of the personnel employed within 1995 and 1999, Heads explained that in 1995-96 only 4 of the Units (20%) had between 2 to 7 employees. In 1998-99, there were 11 (55%) Units with 3 to 10 employees. This implies the improvement of the administrative support to develop the Units operations at the HE institutions.

The Units' Existing Status

To answer the second study question: ìHow do heads perceive their Unitsí existing status and development?î Four items about the existing status of the units, their development, reasons for their development or weakness were presented.

Heads were asked how they perceived the existing status of their Units as compared to 1980s when many Units were not yet established or developed. Heads were generally positive regarding this point. Fifteen units (75%) were rated as improving which is consistent with Marzotto (1991) findings.

Heads also confirmed that their Units are vibrant from the technical, financial, and administrative aspects with eight heads (40%) viewing their Units as being active and only two (10%) expressing their units were in trouble.

Heads were requested to provide reasons why they felt that their Units were active or not active. Table 3 presents their responses. The three main reasons frequently emphasized for a healthy development of the Units by the majority of the respondents were:

(a) "improvements and new acquisition of modern technology and soft-ware"(cited by 45% of the respondents);

(b) "improved administration support for media use in teaching" (cited by 20%); and

(c) "an effective utilization of resources" (cited by 20%).

Table 3: Reasons for Unit Health

Reasons	Freq	%
Improvements and acquirement of modern technology and software	9	45%
Administration support for media use in teaching.	4	20%
Effective utilization of resources	4	20%
Availability and competence of technical expertise.	3	15%
New Building.	2	10%
Effective communication with the users.	2	10%
New Approach.	1	5%
Availability of training.	1	5%
Improvement of learning process among students.	1	5%
Commitment and dedication of staff.	1	5%
Extended hours of operation.	1	5%

The main reasons given for the Units being in trouble (see Table 4) were:

(a) "a weak administrative support on the immediate needs" (cited by 10%); and

(b) "lengthy dysfunctional bureaucratic procedures" (cited by 10%).

Table 4:Reasons for Poor Unit Health

Reasons	Freq	%
Weak administrative support on the immediate needs.	2	10%
Lengthy dysfunctional bureaucratic procedures.	2	10%
Poorly trained staff in current technology.	1	5%
Bureaucratic problems in vision at higher administrative level.	1	5%
Lack of authority, budget control, staffing at local level.	1	5%
Uncertainty about future.	1	5%
Lowered ID staff members.	1	5%
Lack of high level of understanding of real function of the center by faculty.	1	5%
Lack of educational materials.	1	5%
Lack of technology updating.	1	5%

Serious Challenges

To answer the third study question, the heads were requested to clarify the serious challenges facing their Units. Table 5 presents their responses. The top rated ones were identified as follows: (a) ìinsufficient or limited materials/supplies/resources/spaceî, (cited by 55%); (b) ìinexperienced personnelî, and limited/inadequate training of staffî, (cited by 30%); c) ìneed to employ new staffî, (cited by 30%); and (d) lack/ limited/ budget fund (cited by 15%).

Table 5: Most Serious Challenges

Reasons	Freq	%
Insufficient or limited materials/supplies/resources/space.	11	55%
Inexperienced personnel and limited/outdated training of staff.	6	30%
Need to employ new staff.	6	30%
Lack/limited budget/fund.	3	15%
Developing in quality as well as quantity.	2	10%
Textbook management should not be carried out by LRC.	2	10%
Faculty/students are not cooperative in using center.	2	10%
Need to from a separate media service unit.	1	5%
Control of information process is archaic.	1	5%
Faculty do not believe in instructional development benefits.	1	5%
Frequent technical problems.	1	5%
Lack of maintenance contracts.	1	5%
Lack of equipment security system.	1	5%
Poorly trained faculty.	1	5%
Low staff motivation.	1	5%

Personnel Levels/Professional Development

To answer the fourth study question: "What are the main administrative issues/problems of the Units?" Two items about the number of personnel employed for four academic years, and the titles of positions added since 1994-95, were presented.

Heads were asked to list the number of personnel employed within 1995 and 1999. Table 6 shows the positions in these years. In 1995-96, only 4 of the Units had between 2 to 7 employees. In 1998-99, there were 11 Units with 1 to 10 employees. This finding shows a clear trend toward increases in staff with 11 Units or 55% of the results indicating additional employees.

Table 6: Employment Levels of Staff

No of Employees	1995-96	1996-97	1997-98	1998-99
1	-	-	4	2
2-4	3	6	4	3
5-7	1	-	2	2
8-10	-	-	2	4
N/A	17	14	8	9
Reporting Units	20	20	20	20

Titles of New Positions

On the question requiring respondents to state the titles of the positions added since 1994-95, it was found that positions as listed in Table 7 were reported.

Table 7: Titles of Positions

Title	No of Units
Computer specialist	6
Educational technologist	5
Library specialist	4
LRC/media specialist	3
Head	2

2. Budget and Services

To answer the fifth study question: "What is the financial status and impacts on the Units?" Three items about entire budget figures for four separate years, identifying the Units funding sources, and generation of revenue were presented. This part of the questionnaire asked for the entire budget figures for four separate years: 1995-1999. Heads were requested to enter corresponding figures for each of these years. However, one of the most noteworthy findings of this study is the total lack of reliable information on this particular item. None of the respondents gave away any figures on this item. As a result, funding patterns could not be identified.

Heads were asked to identify their Units funding sources. The majority of responses suggest the central budgeting system as the main source and that "any budget for the center comes from the colleges budget".

When Heads were also asked if their Units generate revenues, only one Unit claimed that it generated revenue by charging clients for its services. It is more likely that this was a personal attempt by this unit since it occurred in a public Higher Education institution where service provisions are free.

Involvement in course materials production

To answer the sixth study question: "what are the outputs of the Units"? Three items about involvement in the course materials production, the formats by which the instruction is delivered to students and the methods employed to promote the services were presented.

Heads were requested to determine if their Units are directly involved in the course materials production, or delivery of instruction. It was found that fourteen Units (70%) produce course materials. It was also found that many Units, e.g. Health Education Institutes Media Units, do not produce such materials. They are widely dealt with as media services that take care of equipment and supply of ready-made course materials to lecturers.

Instructional Delivery Formats

Heads prioritized the formats by which the instruction is delivered to students (see Table 8) as follows: classroom training (cited by 45%), AV library (cited by 40%), multimedia laboratory (cited by 40%), others (course books, teaching materials /notes/models) (cited by 20%), and broadcast TV (cited by15%).

Table 8: Instruction Delivery Formats

Format	Freq	%
Classroom Training	9	45%
AV Library	8	40%
Multimedia Laboratory	8	40%
Others (course books, teaching materials/notes/models)	4	20%
Broadcast TV	3	15%
CAL Software	2	10%
Closed Circuit TV	2	10%
AV aids (transparencies, slides, media packages)	1	5%
N/A	5	25%

Promotion of Media Services

Heads were requested to explain the methods employed to promote the services. Findings show (see Table 9) three top rated methods of promotion. They are: faculty/student workshops (cited by 45%), newsletters (cited by 35%), and committee work (cited by 25%).

<div align="center">**Table 9: Promotion of Media Services**</div>

Method	Freq	%
Faculty/student workshops	9	45%
Newsletters	7	35%
Committee work	5	25%
Brochures/flyers	4	20%
Induction/orientation program	2	10%
Media Fair	2	10%
Word of mouth	1	5%
Honoring media users	1	5%

All the respondents did not, however, mention mechanisms by which they can measure their clientsí satisfaction in reaction to these methods which are widely used to make services known to clients. They also did not mention new technical applications such as Internet.

3. Professional Support and Development

To answer the seventh study question: "Do Omani media Units provide/need professional and/or instructional development skills for their staff and/or faculty members? What types of skills?" Six items about provision of instructional development, forms of instructional development, staff accreditation program, certification programs, external professional organization assistance, and types of assistance were presented.

Provision of Instructional Development

Heads were asked if their Units have instructional development sections. Only eight Units (40%) offer instructional development support. This finding implies that the roles of the Units are basically technical in nature since only 40% stated that they provide this kind of support to their faculty/students.

*** Forms of Instructional Development**

Those who responded positively gave the following forms of instructional development support: using educational media laboratory, applying small media to teaching and learning, LRC club activities (e.g. windows-power point-excel-word), and training the trainers.

*** Accreditation Program**

Heads were asked if a staff accreditation program to promote quality control

of media specialists would be of assistance. Ten Units (50%) showed interest in such a program. This ratio shows high interest in the area of college/university programs accreditation.

* Certification Program

Heads were requested to verify whether a media specialist certification program was considered necessary or not. Ten Units (50%) were again in favor of initiating the certification program. This implies high interest in this particular area of quality control.

* External Professional Organization Assistance

Heads were requested to show if there is anything professional organizations such as UNESCO or ALECSO can do to assist with the challenges faced by centres/services. Eight Units (40%) showed interest in any form of assistance. This finding does not show interest in getting assistance from external Arabic and/or international organizations

* Types of Assistance Needed

Those who responded positively provided the following types of assistance required: a) provide colleges with experienced people in self learning techniques, b) provide assistance in production of video/audio products, c) provide fund to improve the Unit, d) conduct information technology conferences, and e) train media staff. This list was presented by at least 8 of the 20 Units. It shows that the need mostly falls under two main categories, developing: (1) the human resource development and (2) the technical resource assistance.

Discussion

The results obtained by this study show that the Omani higher education units have received an improved positive administrative/faculty support and are actively developing in terms of staffing, equipment, and finance due to two main factors. These are "improvements and new acquisition of modern technology and software" and "improved administration support for media use in teaching". It can be concluded that the existing status of these Units as perceived by their Heads is quite impressive. However, the units face serious challenges which are ìinsufficient or limited materials/supplies/resources/space", "inexperienced personnel", "limited/inadequate training of staff", and "need to employ new staff"'. It can be concluded that although modern technology is acquired, its needed support is not sustained with the required facilities and/or experienced staff. These

are corroborated by previous studies that concluded that an Omani Higher Education media unit is characterized by the under-utilization of advanced technology; and unsatisfactory staff skills to fulfill the required level (Al Musawi, 1995; Al-Hajri, 2000; Al Khawaldi, 2000). Al Khawaldi (2000) states that "although installing modern technology is realized as one of the Omani HE policies to meet the needs arising from the increasing number of students and staff, there are insufficient resources allocated for the upkeep, specifically during the nineties". Other research also explains that new technologies require new skills and that Units are falling behind in human resource development. There is, therefore, a strong need for updating technology and retraining staff (Marzotto, 1991; Abu Jaber & Osman, 1996).

When Heads were asked if their Units need to get assistance, in areas of technology and training, from UNESCO and ALECSO, only few perceived that as a necessity. This can be interpreted that the availability of this assistance may be obtained by other local channels and/or overseas agencies. Those Heads responding positively show that the need exists to develop the human and the technical resources. Lack of financial information shows that most of the studied media Units are not independent financial entities in their institutions. They either follow the institutional library services where they are partially incorporated, or they are directly governed by their parent institutions, which in turn leave them having no say on their budgets. This reasoning is also documented by Al-Hajri (2000) which shows that a Unit is considered as part of the library services. It is also clearly supported by Heads' response to their Units funding sources which are mainly through the central budgeting system. Al Musawi, (1995) substantiates these findings by indicating that central-budget financial support is one characteristic of an Omani HE media Unit. Lack of financial information, specifically in some certain cases where Units were identified as independent, could also be attributed to the powerlessness of Heads who are not consulted before the budget decisions are made or are hesitant to question their superiors. Only one Unit shows an interest in commercializing its services thus attracting extra funds for its operations. Regulating and commercializing some media services, as practiced by many worldwide HE institutions (Marzotto, 1991), could be of benefit to the Units and their parent institutions in order to ensure its educational quality. However, a good balance between educational and commercial activities should be ensured to maintain the Units credibility (Al Musawi, 1995).

A clear trend toward staff increase along with a need to employ staff with specific specializations and qualifications are reported. These findings are supported by the need perceived by the Heads to initiate college/university media specialist certification/accreditation programs. They are also supported by the serious challenge mentioned above: ìinexperienced personnel and limited/inadequate training of staffî and by literature (Marzotto, 1991; Al Musawi, 1995 Abu Jaber & Osman, 1996; Al Khawaldi, 2000). The common administrative issues/problems of the Units could be summarized as the need to improve the manpower in terms of quantity and quality.

Most of the Units produce course materials. However, some of them are only considered as purely media service providers. The formats by which the instruction is delivered to students are classroom, AV library, and multimedia laboratory. The promotional activities of the Units are made through training workshops, newsletters, and committee work. Although these methods are traditional, they are necessary to publicize the services in the newly established Omani Units. Some Units, such as the "Sultan Qaboos University" initiate, their webpage on the net, but it is not yet fully utilized for promotional purposes. In addition, there is a lack of mechanisms by which the Units can measure their clients' satisfaction. This lack of evaluative measure is mentioned by Al Musawi (1995). The need for regular formal evaluation of clients" satisfaction is recommended by the literature (Erickson, 1970& Charmer, 1980 Al Musawi, 1995). In sum, the output of media Units requires more emphasis on improvement of promotional and evaluation methods.

It could be concluded that the Units' role is in most cases of technical nature. However, if faculty/student support is to be provided by the Units, it should involve an instructional development activity. Forms of instructional development support now provided include using educational media laboratory, applying small media to teaching and learning, and LRC club activities. It is obvious that the list mostly contains computer-based training which is a part of an instructional development program. This finding can be interpreted if compared to Table 3 top rated title of computer specialists. These specialists appear to be active in running mostly computer-based training workshops. But what instructional development program does is embedded in instruction/learning through a systematic approach. The importance of attaching such an activity to media units is literary evidential (see for example: Charmer, 1980; Rutherford, 1983; Smith, 1992; Al Musawi, 1995). The literature shows that the presence of instructional developers at media Units helps them and the clients to design, select, imple-

ment, and/or evaluate produced-course materials and this must be the trend in Oman.

Conclusion

Although the existing status of the Omani HE media Units is advanced, a need to develop the human and technical resources is reportedly high. A need exists to employ new skilled staff and experts with specific specializations.

Heads of the Units need to be involved in the planning of Units' budgets, staffing, facilities and other activities to ensure effectiveness. There is also a need to consider these Units as independent entities, specifically in terms of budgeting to make them effective. Little effort has been made to earn income from media services provided by the Units. Within the given financial constraints, more attention should be given to commercialize audiovisual services and generate an income for the Units and/or their parent institutions in Oman.

The need to establish a well-constructed instructional development programs in institutions seems to be significantly important. It was found that there is a need to establish formal evaluation instrument and practice to measure clients "reaction to Units" promotional methods and practices.

Recommendations

In accordance with the findings of the research, the following are recommended.

* The attitude and initiatives to establish more independent, education and media technology, and/or learning resources centers/units should be encouraged in Institutions.

* Strategic policies incorporating mission, administrative, financial, technical and academic roles of such centers/unit should be formulated and implemented by institutions.

* Formal evaluative mechanisms should be instituted and regularly performed by centers/units in support of the existing promotional methods to enhance centers/units effectiveness and efficiency.

* Policies and programs for internal/institutional staff/faculty development should be formulated and pursued with vigor.

* Centers/Units should be involved in decision-making processes on financial issues such as: budgeting and products commercialization.

* The present administrative systems of centers/units should be reviewed and modified/altered to allow Centers/Units to be autonomous/semi-autonomous.

* There is a need to encourage research activities to enable the system to assess its standing and improve productivity.

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