# DEVELOPMENT AND MANAGEMENT OF LEARNING RESOURCES CENTRE: A RETROSPECTIVE ACCOUNT OF THE INSTRUCTIONAL RESOURCES CENTRE (IRC), UNIVERSITY OF PORT HARCOURT

By

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**Abstract**

This study explored the experiential learning potentials of a reflective account of the development and management of the Instructional Resources Centre (IRC) of the University of Port Harcourt to espouse the operations and challenges of managing a learning resources centre (LRC). The study highlighted the place of operational policies, communication channels, functional specialisation as well as staff training and professional development in the operations of the instructional resources centre of the University of Port Harcourt which presents as a production oriented learning resources centre. The negative impact of misapplication of operational policies and misalignment of centre vision/goals with staff progression were also highlighted. The study then recommended that the director of a learning resource centre should be a specialist in educational technology. With such professional background he would remain focused on the tasks of creating, facilitating and managing learning resources effectively for the achievement of the objectives of the centre. The director should be proactive in identifying skills gaps and also respond appropriately with remedial actions to maintain effective service delivery.

**Key words:** *Development, Management of Lerning Resources Centre*

## Introduction

The concept of learning resources centre can be explained by a metacognitive examination of the meaning of the three words; Learning, Resources and Centre. Application of metacognitive strategy, which is renowned for its capacity to reveal the declarative knowledge of concepts (Pierce, 2003), gives the following individual and collective meanings of the three words as follows:

1) Learning: Learning can be a process as well as an act. The process of effecting a change in human behaviour as a result of experience and the act of changing ones behaviour, preferences or values due to new experience.

2) Resources: Resources are facilities and provisions made for the achievement of certain behavioural objectives. A learning resource therefore aims at the acquisition of new knowledge and skills.

3) Centre: The centre is a specified location where the resources, which can be human, material and /or

4) technological systems, devices and facilities, are provided, properly organised and applied for the achievement of learning objectives.

And so the learning resource centre is a place where human expertise in knowledge and skills is enabled to interact with technological gadgets, systems and provisions in an organised manner to facilitate the attainment of human understandings and behaviours within contiguous and/or non contiguous learning environments. This perspective was aptly captured by Miller (1971) in a foremost discuss of the concept of learning resources centre.

> …the concept of unified service including both library and audio/visual materials is receiving rapid acceptance among educators. Whether it is called "materials centre", "curriculum/laboratory" or "learning resources library", its purpose is to help create a richer learning environment through providing appropriate learning materials, experiences and resources (Miller, 1971).

Writing in this vein within the early decades of the audio/visual technology, Wheelbarger (1974) noted that

> The proliferation of print and non-print materials pushed the school library toward an instructional materials centre concept. This meant that space had to be provided for audio visual equipment. Audiovisual material had to be catalogued and stored. Production facilities were needed, and there had to be study carrels or other learning spaces.

This amalgam of multiple functions for the facilitation of effective learning is also evidenced in the Association of Educational Communications and Technology (AECT, 2007) definition of Educational Technology presented by Reiser and Damsey (2012), as

> the study and ethical practice of facilitating learning and improving performance by creating, using and managing appropriate technological processes and resources (p.4).

They observed that the instructional interventions created by Educational Technologists are meant to facilitate learning and subsequently improve task performance. The learning resources centre therefore constitutes a hub for the practice of educational technology.

The critical tasks of the centre are evidenced in the following functions.

1) Acquisition of learning materials. This function entails:
   - An acquisitions policy
   - The acquisition of digital books and multimedia materials as well as hardcopy text books, graphic learning materials, models, mock ups and other learning objects
   - Proper organisation of this range of learning materials as a library and

the utilisation of same in consonance with fair use policies for the achievement of the objectives of the centre as well as strategic support for the achievement of the objectives of the parent organisation.

2) Provision of instructional support services in form of:
   - Public address and projection system for classroom instruction
   - Mediated learning objects for elucidation of learning matter in classroom and laboratory teaching/learning sessions.
   - Training of centre personnel in the handling of operational systems and equipment.

3) In – house design, development and production of learning materials.
   - Liaison with subject matter experts (SMEs) in different disciplines to design and develop learning objects for the teaching of critical disciplinary knowledge and skills.

- Production of video documentations and instructional television programmes.
- Technical services and maintenance section. The following range of specialist services are rendered in this section for the achievement of the objectives of the centre.
- Still photographic services
- Video camera works
- Video/Television and photographic production
- Library services
- Audio/Visual materials storage and viewing/listening facilities
- Audio recordings, etc.

The success of the aforementioned services however depends on the nature and quality of available human and material resources. In the words of Miller;

the most important characteristic of an effective instructional materials centre is its skilled staff. A mature, experienced and creative professional person who enjoys helping teachers and students is the keystone of an effective program. Skill and knowledge in the total field of instructional materials are a necessity as is a good understanding of child growth and development and principles of learning. Given adequate clerical help and funds, such a person can markedly influence teaching practices (Miller, 1961).

## Examples of Learning Resources Centres

Most learning resources centres are not explicitly structured and equipped for comprehensive delivery of media service. They seem deficient in one aspect of instructional media service or the other.

An example of this deficiency is the case of a university library system which many perceive as a learning resource centre because of the provision of learning materials in both print and non print formats. But the emphasis on learning with resultant absence of materials development

and production function is a deviation from the comprehensive media service expected of a learning resource centre. However, the area of emphasis of a learning resource centre derives from its operational polices which is geared to achieve its unique objectives amidst the overall objectives of the parent organisation. And so it is the peculiar contributions of the media resource centre to the achievement of the overall objectives of the parent organisation that dictates the operational policies of the centre and subsequently the boundaries or limitations of the services provided by the centre.

Another deviation from comprehensive model of media service is the case of the defunct Instructional Resources Centre (IRC) of the University of Port Harcourt. This deviation is informed by the need for the centre to concentrate on the specific areas of service that facilitate the achievement of the goals of the parent organisation. This focus determines the operational policies of the centre. As a production oriented learning resources centre, the IRC was structured to liaise with subject matter experts (SMEs) in the respective disciplines for design and development of instructional materials to serve the learning needs of the different department in the university. The centre also had the responsibility to maintain photographic and video records of major events in the university. But the component of library service and circulation of the productions of the centre was completely de emphasised. The comprehensive model of learning resources centre is therefore an ideal case. In reality, the learning resources centre emphasises the aspect of learning resources service that facilitate the achievement of the prevailing goal and visions of the parent organisation. The strategies adopted for achievement of the goals of the centre and its structure also determine the nature of service rendered.

And so examples of learning resources centres include:
- library systems and laboratories in primary and secondary schools
- Materials improvisation facilities in primary, secondary, and early childhood education centres.
- Instructional materials development centres in higher education institutions.
- State and national educational technology centres.
- National and state libraries, museums and community archival centres.
- Media resource facilities in professional and cooperate organisations

The foregoing review therefore reveals the following classification of learning resources centres:

1) General purpose learning resources centre
2) Special purpose learning resources centre
3) Mini learning resources centre

Although Peterson (1973) identifies a Learning Resource Centre as "a depository for resources and a place where the emphasis is on learning", an obvious difference seemingly exists between the two extremes of the knowledge dissemination and acquisition continuum referred to as instruction and learning. But in reality, none of them can function effectively without the other. This is because effective instruction must be targeted at specified learner while learning aims at achieving new behavioural outcomes using content from teaching source. This perspective therefore tries to diminish the dichotomy between the learning resource centre and the instructional resource centre. More so, the field of Educational Technology has applied the concept of Educational technology centre, Learning resources centre, Instructional resources centre, Instructional media centre, etc interchangeably to refer to service provisions for use of mediated learning matter to support and enhance the realisation of educational objectives.

Defined as the study and ethical practice of facilitating learning and improving performance by creating, using and managing appropriate technological processes and resources, (AECT, 2008), Educational technology actually presents its tasks and professional practices in the functions of the learning resources centre
And so by undertaking a detailed study of the structure and functionality of the different sections of the instructional resources centre, the trainee educational technologist would gain the knowledge of the processes of conversion of

instructional theories and principles of application of same into real life education and training for the facilitation of learning and improvement of task performance, as well as the management of the inherent processes. By adopting an experiential learning method, this retrospective account of the establishment and management of the defunct instructional resources centre of the University of Port Harcourt is hereby relied upon as a case study to teach trainee Educational Technologists the structure, specialist functions and the management of a learning resources centre.

The case study method of teaching and learning has been applauded for the capacity to engage the learner with experiential contexts of learning matter. It is known to facilitate learner mastery of content and enhance academic achievement (Schubk et al, 2012). The method also facilitates critical thinking (Bowe et al, 2009), and the motivation to participate in class activities (Murray-Nseula, 2012).

The case based method is deeply rooted in Kolb's experiential learning circle. The four continuous cycling stages of the experiential learning strategy is known for efficient learning outcomes when learners are so exposed. The attributes of the case based method of teaching and learning hereby informed the application of same in espousing the operational dimensions of concepts in the development and management of learning resource centre.

The major significance is the knowledge gains that this reflective account accords the learner on the criterion issues in the

development and management of learning resource centre.

**Aim of the study**

This study envisions to achieve the dual aim of espousing the procedures and functional structures adopted by the University of Port Harcourt in the development and management of the Instructional Resources Centre (IRC) as well as the target objectives that the learner is expected to achieve on the subject of developing and managing a learning resources centre after due study of this account.

**Objectives of the study**

The study shall achieve the following objectives:

1) Highlight the policy issues in the management of the Instructional Resources Centre of the University of Port Harcourt.
2) Identify the funding modality adopted in the management of the IRC.
3) Highlight the mode of communication adopted in IRC for effective operation of the services of the centre.
4) Highlight the functional roles of the different specialists in the service of the IRC

**Establishment of the Instructional Resource Centre (IRC)**

The Instructional Resources Centre (IRC) of the University of Port Harcourt was established about 1981 by the Governing council of the university. This was while the disciplinary units of the university operated the schools structure. However, based on senate approval of the adoption of the faculty and departmental structure, the Council of the University of Port Harcourt, at its 21st meeting of July, 1982 approved a fundamental change in the academic structure of the university from the school to faculties and department structure. This resulted to the following faculties with the respective number of students as at 1985.

| FACULTY | NO OF STUDENTS |
|---|---|
| Humanities | 648 |
| Social sciences | 621 |
| Science | 970 |
| Education | 561 |
| Engineering | 315 |
| Health sciences | 361 |
| Management sciences | 121 |
| Total Undergraduates | 3498 |
| Graduate students | 178 |

Table of students population by faculty (1985)

The IRC provided instructional support services to a total undergraduate students population of 3,498 students, 178 graduate students and a total academic staff strength of 376 (Uniport 10th Anniv. bulletin, 1985). The centre was established with a headship status of a Director and membership of the university governing council. As part of its take-off support, the centre was granted the staff and facilities of the Audio/Visual unit of the university library, which had been providing instructional support services to faculty prior to this time.

On the employment of the Director of the centre in the status of Senior Arts Fellow, the University Council gave the following directives to avoid duplication of functions in the media service of the University library and the Instructional Resource Centre.

- The library department should continue to maintain an Audio/Visual service unit to provide traditional library service to users of information materials in audio and visual media formats.
- The library department and the IRC should share the technical equipment and facilities already acquired in the university library in a manner that would facilitate effective performance of the unique functions of each department. The sharing modality would enable the library department retain the equipment and facilities for listening and viewing audio/visual resources. The equipment and facilities that find application in media production services shall be retained by the instructional resources centre.

- All pre-produced instructional media materials should be retained in the university library with nominal equipment to facilitate the preview of the content of such media objects.
- The IRC shall make copies of every media object produced in the centre available to the university library to be stored in the Audio/Visual unit for learning purposes.
- The IRC was also directed to maintain viewing and listening facility for review of media objects produced at the centre.

By the mandate of the university council, the establishment of the Instructional Resources Centre (IRC) was actually midwife by the university library. The University Librarian collaborated with the Audio/Visual technologist of the University library non book media service (The researcher) to develop the layout of the three rooms of Lecture Block C in Choba Park of the university as office space allotted to the IRC based on the projected structure of the centre. Mean while, the university was already in the process of recruiting the director of the centre, who eventually came in the cadre of a Senior Arts Fellow.

In her wisdom, the University Council chose the Arts Fellow cadre as suitable for the quality of service, responsibilities and tasks expected of a director in the professional service of instructional support and the enhancement of the quality of teaching and research in a university. On assumption of duty, the director outlined the range of services to be performed by the different sections of the

centre in order to achieve the overall academic support goals and vision of the university in accordance with the mandate establishing the centre. And with the consent of the council, the director facilitated the recruitment of the respective professionals that would perform the requisite tasks in the different sections of the centre.

The IRC was therefore structured with requisite sub units to render the under listed media services:

➢ Instructional design and development
➢ Television/video production services
➢ Photographic and graphics design
➢ Technical services and maintenance
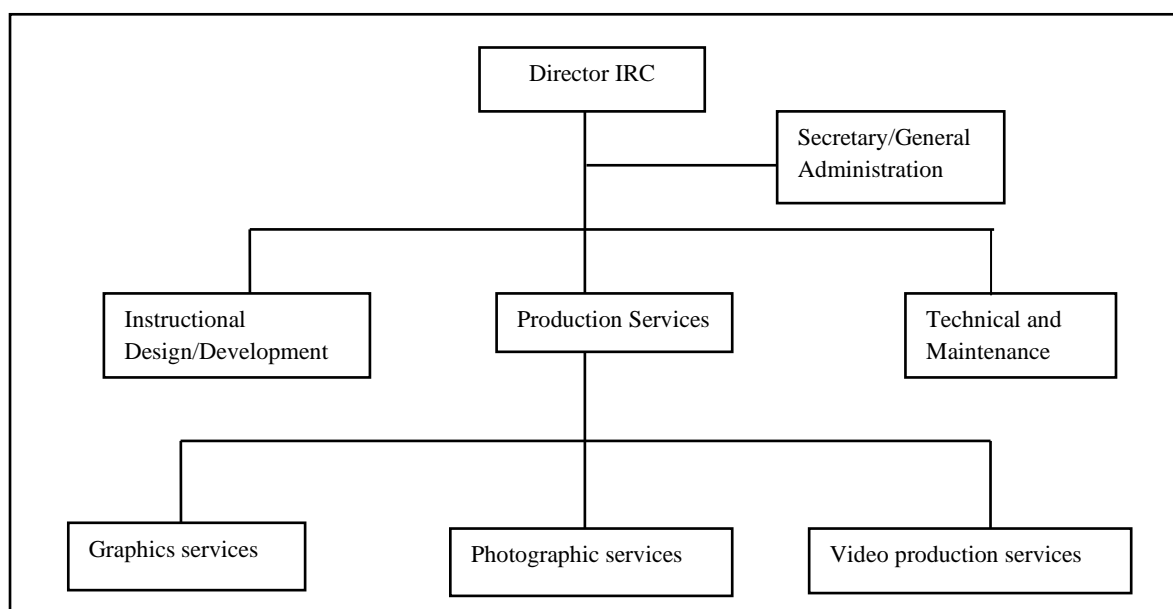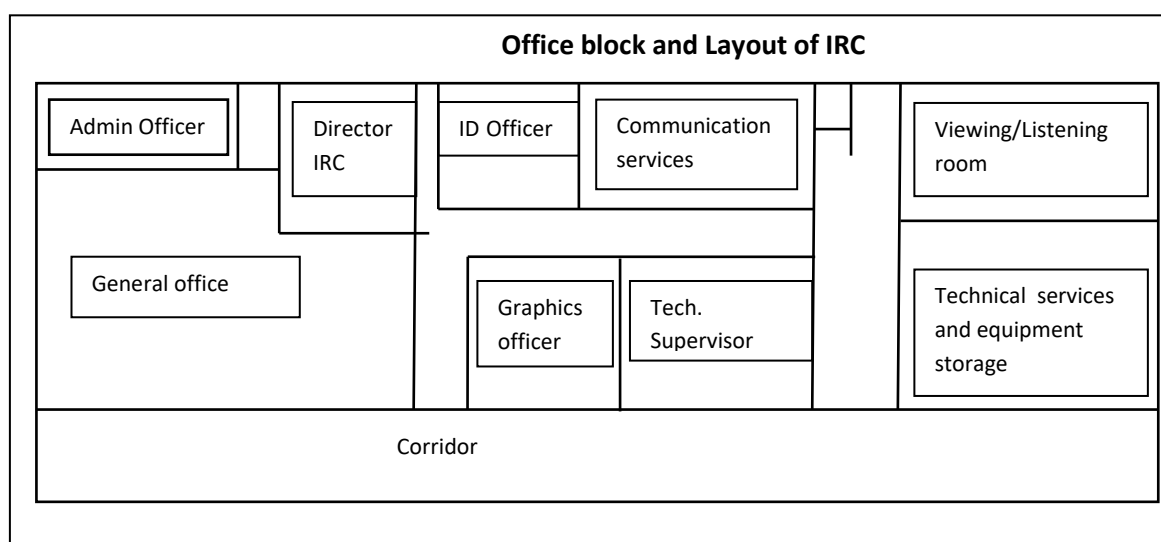➢ General administrative section.



**Fig. 1.** Structure of the Instructional Resources Centre, Univ. of Port Harcourt

Service sections of the instructional Resources Centre (IRC)

The major services of the centre include
- Instructional Design and development
- Production of instructional graphics, photographic, video and general multimedia learning objects
- Production of video documentary of university events
- Production of photographic documentation of university events
- Provision of public address and projection system for classroom instruction
- Provision of in-house listening and viewing facilities for individual/small group study.

The under listed personnel were therefore recruited or deployed to the Instructional Resources Centre. By this effort the centre was enabled to perform the respective services as indicated in the table

**Administrative services section**
The personnel of this section include:
➢ The Director of IRC
➢ The administrative secretary
➢ The executive officer
➢ The clerical officer
➢ The Messenger/Cleaner
➢ The Driver

This section is responsible for the general administrative needs of the centre. It also coordinates the tasks and functions of the different sections for overall goal achievement. The administrative section also maintains record of staff work attendance as well as annual and casual leave, staff evaluation and promotion affairs

**Instructional Design and Development Services**
The Arts Fellow in charge of Instructional development performs the instructional design function, being the major task of this section. He performs this task in liaison with the subject matter exerts (SME) of the respective disciplines in the different faculties of the university. The procedure of functional task performance in the centre holds that the faculty or teaching staff should make a formal requisition for the instructional material for teaching learning. The Director of IRC shall then authorize the Arts Fellow in charge of instructional development to facilitate the development and production of the object of instruction. The instructional developer then plans a meeting with the teaching faculty personnel or subject matter expert. The meeting is actually a collaborative effort of the SME and the Educational Technologist (Instructional Developer) aimed at developing learning object to facilitate the teaching and learning of subject matter. The SME brings in the disciplinary expertise in form of the content, the objectives to be achieved as well as the background knowledge of the learners in the subject. The instructional developer presents the pedagogic and technological requirements for effective delivery of the content to the learners. By applying the skills of design of instruction, he would analyse the tasks involved in the objectives as well as the level of expected performance. He would ascertain the level of disciplinary knowledge and skills that the learner can imbibe with existing background knowledge. The provisions of the learning environment is also analysed

to ascertain the suitability of same for effective delivery of the specified content. The foregoing analysis and considerations of the instructional objective also reveal the format of media object required to communicate appropriate context of learning matter required fro adequate mastery of the content. Having decided the format of media object, the nature of every clip of media object required to communicate the content to the learner without unduly overloading the working memory of the learner is also designedly determined and specified at every stage of the development of the learning object. At this stage, the Instructional developer presents a design document for the production of the learning object which is the storyboard and production script. The project is the transferred to the production department where technical personnel are assigned the task of producing the instructional learning matter as a media object to be used in the delivery of instruction to a specified class of learners.

The prevalent types of media objects utilised during the analogue era of the defunct IRC of the University of Port Harcourt include:

- 4 by 3 inch slides which were projected on slide projectors
- The Cellophane transparencies which were projected on overhead projection (OHP) systems
- The audio cassette and reel tape layer and recorder
- The VHS, Betamax and Umatic video systems.

The respective technical personnel in charge of Photography, graphics design, video camera operation, lighting and audio technicians as well as video editors were variously involved in the production of different media objects required for teaching and learning. While some of these functions have remained intact in this digital era, some others have been modified, merged or subsumed into other tasks in the process of production of mediated learning matter. One example in this regard is the graphics function. Instead of the rigorous painting sessions that graphic personnel engage in the process of developing instructional learning matter in this regard, digital software and skilfulness now combine with Photoshop skills to product the necessary instructional visuals the communicate content as effectively as intended

This section determines and designs appropriate instructional materials for the teaching of respective concepts in the different disciplines. The IRC is actually a defunct arm of the university that operated in an analogue era. And so the predominant format of instructional materials was the overhead transparency, slides, filmstrips, audio and video tapes as well as hard copy charts and graphic objects. Once the design and development decision has been collaboratively made by the subject matter expert and the Instructional designer/Developer, the task of production is handed over to the production services section. Though in some instances, the instructional designer may still undertake aspects of the production services. However, the design of the learning object serves as blueprint

that guides the production of the mediated learning matter. A major stage is the formative evaluation undertaken prior to the final post production editing. This is the implementation stage where the prototype of the instructional material is applied on a sample of the specified audience of learners. Effort is made to monitor learner reaction and the level of learner achievement of the target learning objectives resulting from the use of the material. The essence of this final formative evaluation is the remedy any error in the design and production of the instructional object before the final post production editing

## Production Services Department

The production services unit experienced a beehive of activities. The Arts Fellow in charge of this unit reports directly to the Director of IRC. He supervises the Graphics section, Photocopy, Video production, Reprography and classroom instructional support services.

## The Graphics Section

This unit is responsible for producing the graphic objects required by faculty for delivery of content during classroom instruction. Such requests are made by the Instructional developer in liaison with the subject matter expert (SME). The request is approved by the head of production services and forwarded to the graphic artist for execution. This approval constitutes the authority for utilisation of requisite resources and exploitation of budgetary provisions in this regard

## Photographic Services

This unit is responsible for photographic documentation of major events in the university. Photographic shots of the activities of convocation ceremonies, matriculation ceremonies, Anniversaries, and other major events of the university were produced in photographic albums and preserved as visual records of major events of the university. The unit also produced still pictures of objects for instructional purposes, based on the demand of faculty. All demands for photographic services were approved by the director and routed through the head of production services to the photographic personnel for execution. The unit also handled the production of identification cards for all staff of the university.

## Video/Audio Production

The centre undertakes the production of video documentation of the ceremonial events of the university as well as the production of instructional activities that require the use of video technology to elucidate content or present the context of learning matter. Having agreed with the subject matter expert on the use of video technology as the most appropriate medium for the learning specified learning matter, the instructional developer then presents the request to the head of production who then assigns a team of cameraman, technical personnel, video editor and audio/lighting personnel to undertake the production of the instructional video programme based on the instructional storyboard developed by the SME and Instructional development specialist. This unit also preserves audio records of the events and activities

according to the instructional and documentation needs of the university. Since the prevalent technology of that era was the analogue system, such audio records were made with reel – to reel tapes and cassette tapes.

## Classroom Instructional Support Services

A section of the production services was responsible for provision of the following in support of classroom instruction;

Provision and operation of overhead and slide projection systems

Provision and operation of public address systems in large size classes

Provision of non projected visual objects like charts, maps and other hard copy graphics for classroom based instruction

A group of caretakers and technical assistants were readily on hand to render instructional support services to classroom instructional activities. They were assigned to provide and operate projection systems as well as public address systems in large size classes. The timetable officers liaised regularly with the director of IRC to ensure that classroom technical assistants were duly informed of the schedules of large classes and proper arrangements made to ensure that the public address systems were functional and available for classroom lectures.

A culture of task accomplishment prevailed as the philosophy of work in the Instructional Resources centre. The implication of this philosophy is that even amidst complaints and procedural inadequacies, the staff must be available and also perform the tasks successfully

and later present his complaints for attention. Even when classroom lectures linger beyond 4pm, the official end of work day, the staffs remain on duty to ensure satisfactory service.

## Maintenance/Technical services

The maintenance and technical services section of the IRC which was headed by the author was responsible for maintenance of operational procedures and standards especially as it relates to the use of equipment and facilities of the centre. The unit was also responsible for monitoring the operational safety and storage of all media equipment and making same available in time of need. The unit trains technical assistants and caretakers on the handling of equipment and facilities and the routines of field work in this regard.

Other critical functions of the unit include post production editing of video learning objects and documentations. This function is performed in liaison with the director of the centre who also functions as the executive producer of all documentary programmes. However, if the video documentary is an instructional programme, the post production editing is performed in liaison with the subject matter exert (SME)

## Reprographic Services

The Instructional Resource Centre (IRC) also rendered staff identity, photocopying and general reprographic service to the university. The centre liaised with the Registry department being the custodian of all staff information to obtain the

department of service of each staff, the cadre and status as ell as the staff identification numbers. The information is then merged with the photograph and signature of the staff during the image capturing stage at the IRC. Cases of loss of identity cards and replacement of same were handled based of the consent of the current head of department who affirms that the individual is still a staff of the university.

**Sources of Funds**

While statutory budgetary provisions were made for purchase and acquisition of equipment and facilities, Costs associated with reprographic services were borne by the clients. Payments for services rendered to departments were made through transfer of funds from the budgetary provisions of respective departments to the income vote heads of the IRC. Such internally generated funds were relied upon for purchase of reprographic consumables and sustenance of the services of the centre in times of budget deficits. Imprest accounts were also made available to the office of the Director of IRC for general administration of the centre and the head of the production services for sustenance of the services of the unit.

**Challenges**

Before the final demise of the IRC and eventual reactivation of its remains as the technical services section of the Educational Technology laboratory of the Faculty of Education, the IRC became evidently unable to render due services to the university as a result of the following challenges;

1) There were very poor budgetary provisions for the services of the centre. This state of affairs arose from fiscal cuts in funds allocation to the education sector due to prevailing economic downturn that was facing the country.

2) The IRC could not sustain the classroom instructional support services because the centre could neither replace obsolete equipment nor fund the repair of faulty ones.

3) The centre could not purchase the consumables for the production of slides, transparencies, graphic objects and video production services.

4) The centre failed to retrain the technical personnel to acquire the digital skills which had become the norm in media service. It therefore had to contend with the skills gap while managing to perform some tasks with analogue skills in a digital era.

5) One critical challenge is the mass communication professional background of the head of communication services and her inability to self-adapt to professional practice of the core educational technology tasks of design and development of mediated learning matter.

**Analysis and Conclusion**

This retrospective account of the development and management of the defunct Instructional Resources Centre (IRC) of the University of Port Harcourt has among other things revealed areas of concern in the different aspects of the operations of the centre.

**Operational Policy**

Though guided by the decisions of the university council, the IRC had an "unsung" operational policy. The specifications of the policy include:

1) The centre was structured and operated as a production oriented learning resource centre. It had facilities for individualized study and small group exploration of mediated learning objects.

2) The centre had a library of the learning and documentary media objects produced in-house and also made copies of same available for use in the main library of the university.

3) An instructional support philosophy that prevailed in the centre, especially for classroom learning activities is that "service must be sustained until classroom lecture is over".

**Functional specialisation**

The IRC had the following range of specialist personnel that performed the respective professional functions:

1) Instructional designer/Developer
2) Communication specialist/Television producer
3) Video and Photographic cameramen
4) Graphic officers
5) Photographic and video editors
6) Audio/visual technicians
7) Technical assistants/Reprographic personnel

**Communication**

There was established line of communication to facilitate the initiation and execution of tasks. Requests for services were routed appropriately and authority for task execution also appended by authorising officers.

**Liaison with Subject Matter Experts (SME)**

There was a functional liaison between the Instructional development personnel of the centre and subject matter experts in the respective disciplines of the faculties of the university. The specialist functions of each personnel were cooperatively and collaboratively engaged in the process of design and development of instructional media

**Funding**

The Instructional Resources Centre (IRC) suffered lack of funds arising from inadequacies in budgetary provisions due to national economic down turn. Consequently, the IRC failed to sustain the services that depended in budgetary provisions. But other services for which special funds were made available were readily executed. Examples of this kind of service include the production of staff identity cards and video documentation of convocation ceremonies and inaugural lectures. However, the IRC could not adapt service delivery to generate funds to supplement the short falls in budgetary provisions.

**Human Resource Management**

The inability of the university to align the educational and professional backgrounds of the major officers of the IRC with the specialist functions of an Educational Technologist was a critical omission in the management of the human resources of the centre. The IRC also failed to use training and retraining activities to equip staff with

the trendy digital skills they require to operate modern equipment. These short falls in human resource management coupled with a conflict ridden work environment in the IRC to mar effective performance of the tasks of the centre and eventually led to the demise of the IRC. It is in this vein that Bennie (1977) fore-warned that "power struggles and conflicts beneath the surface can adversely affect the success of the services of a learning resources centre.

## Recommendations

Based on the foregoing experiential account of the Instructional Resources Centre (IRC) of the University of Port Harcourt and the lessons derivable there from, we hereby recommend as follows:

1) That the director of a production oriented learning resources centre should be professionally qualified and experienced in the field of Educational Technology He should also be experienced in management of the supportive specialist media functions that facilitate effective creation and utilisation of learning resources.

2) As a performance oriented organisation, the learning resource centre should be proactive in identification of skills gaps amongst its staff and promptly implement remedial programmes to fill the gaps and avoid deficiencies in task performance.

3) The centre should also be proactive in implementing funds generation policies to augment operational costs as to sustain the services to its parent institution.

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