Establishing Learning Centres Anywhere: Keys to Success

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Abstract

Institutions establish learning centres to extend their reach by providing access to learner support services closer to learners' homes and businesses. The success of these centres often depends on community participation, the hiring and training of quality staff, the provision of technology to help people learn, and the collection and analysis of data that can be used to guide the operation and marketing of the centre. In developing and emerging nations where resources are often scarce, learning centres may also enable the public to access information and communication technologies. Thus, centres that may have been established to help students at a particular institution(s) learn and nurture their self-confidence, may acquire new roles that help improve and sustain the livelihoods of all community members. This evolution to knowledge hubs requires those who manage the centres to think carefully about their decision-making processes and the services that would lead to sustainable and financially affordable entities that can meet the needs of their institutional learners as well as those who are marginalized. Based on the authors experiences in working with educators in Southeast Asia, sub-Saharan Africa, and North America, the keys to success could be summarized as follows: serve your learners, involve your community, set reasonable expectations, select and train quality staff, use technology effectively, market the centre, collaborate, and evolve.

Key Words: learning centres, study centres, telecentres, regional centres, knowledge hubs, knowledge networks, education, ICTs, ICT for development, Millennium Development Goals, e-learning, online learning, open learning, distance education, ODL, Africa, Southeast Asia

Introduction

According to UNICEF and UNESCO (2013, p. 2), education is key to sustainable development:

- "As a fundamental human right, universal access to quality education, training and learning is an essential prerequisite for individual empowerment as well as for the development of equitable societies and the promotion of social justice.
- Education plays a key role in the creation of sustainable communities and environments.
- Education is a catalyst for inclusive economic growth, equipping people with the relevant training, skills and competencies to secure decent work and be productive citizens.
- The provision of education contributes to progress on a range of development goals, including the eradication of poverty, social cohesion, good governance and participatory citizenship, improved health and gender equality."

Thus, it is important for all countries to increase access to quality educational opportunities. Increased access not only means more physical access, but also increased affordability and eligibility. In developing and emerging countries, the need to increase educational access is great yet the resources are few. In these countries, governments are often tasked with the responsibility for providing access to education at the same time as they are faced with rising populations and scarce resources. Because it is not practical for governments or institutions to build a campus comprising classrooms, laboratories, and residencies in every district, institutions may establish learning or study centres that expand their reach by offering face-to-face contact in local communities. Over time, some learning centres will evolve to become knowledge hubs that incorporate the functions of learning centres as well as the functions of public information and communication technology (ICT) access points or telecentres. When such centres are linked and managed by a single entity, a knowledge network is formed.

The terms used in this document are based on the brief explanations below.

- ***Learning centre*** / study centre / learner support centre – established by an institution or group of institutions to extend its reach by providing access to learner support closer to learners' homes and businesses. Its primary function is to attract, support, and retain learners. Learning centres are often established in existing educational institutions and share physical and human resources with a distance learning institution.
- ***Regional centre*** – a sub-office of the parent institution. Usually, it is a purpose-built centre that carries out many of the administrative and delivery functions of the institution, but on a smaller scale. In some instances, the regional centre is responsible for several learning centres that are located in rental or rent-free space provided in institutions and/or communities within a region.
- ***Community learning centre*** – a local educational entity that lies outside the formal education system. It is usually established and managed by local residents to provide lifelong learning opportunities that focus on literacy and basic education. The centres may also organize activities that promote cultural programs, computer training, empowerment of women, health, hygiene, income generation, and skill development (UNESCO, 2008).
- ***Telecentres*** / Internet centres / cyber cafes – public ICT access points (Royer, 2013; United Nations Economic Commission for Africa, 2011)
- ***Knowledge hubs*** – provide public access to technology, and gather and distribute information about and for the community. They are intermediaries between telecentres and knowledge networks (Ariyabandu, 2009). Learning centres may become knowledge hubs by incorporating the functions of telecentres, thereby affording members of the community access to technology and information tailored to suit community needs.
- ***Knowledge networks*** – group of knowledge hubs that share information and expertise, and may advocate to government and private interests (Ariyabandu, 2009)

Rationale for the Learning Centre

Supporting learners as they strive for success

Learning centres are often established to provide easy access to an institution or group of institutions and to assist learners who may experience difficulty completing assignments and courses because they lack access to educational resources, ICTs, tutoring, and guidance. The presence of learning centres in a community may also financially benefit students as they will not need to travel to the primary institution as often and thus, avoid the loss of income they would incur if they had to frequently travel to a major centre. From a political perspective, all citizens need access to educational opportunities, not just those in

selected urban areas. Thus, learning centres may be established to address national as well as local community needs.

Learning centres should be designed to meet the needs of learners and to support their efforts as they strive for educational success. Accordingly, learning centres may enable learners to:

- obtain information about educational offerings from one or more institutions and/or attend inductions/orientation programs offered by institutions;
- receive courses from one institution or group of institutions;
- procure information and educational resources;
- access ICTs such as computers, the Internet, and videoconferencing facilities;
- listen to radio programs or watch video recordings or television programs;
- access library services;
- learn how to improve their study, writing, and reading skills;
- gain insight into coping strategies that may help them address stress and feelings of isolation and overload;
- use resources that help them overcome disabilities that affect their capacity to learn;
- meet with a tutor or mentor;
- participate in group tutorials;
- gather for seminars and/or discussions;
- drop-off and pick-up assignments;
- obtain feedback on assignments;
- participate in mock examinations;
- take supervised tests or examinations;
- study away from home;
- obtain counselling;
- learn about educational and employment opportunities related to their course of study; and
- immediately apply the knowledge and skills they acquire. For example, when the learning centre for health workers is located within a health facility, students can immediately practice and apply their new skills.

Thus, a variety of activities can be conducted at learning centres, and space must be provided for asynchronous and synchronous learning activities, social interaction, and administration. Socialization is an important activity that can be facilitated at learning centres; students share their knowledge and experiences as they complete their educational journey as well as provide each other with moral support.

The actual functions performed at learning centres will vary depending on the available resources and the feedback provided by students and the community. Some may offer basic services while others offer more sophisticated assistance. A few examples of the different forms of learning centres and the services they provide are outlined below.

- The ***Malawi College of Distance Education*** (MCDE) established study centres, throughout Malawi, that provide academic and administrative support. At these centres, students are able to register for courses, pay course and tuition fees, meet with a mentor, seek counselling, submit tutor-marked assignments, take supervised examinations, and obtain educational resources, primarily print material. These centres may be established at secondary schools and operate after the regular students have gone home and on the weekends.
- The ***Wawasan Open University*** (WOU), Malaysia, enables individuals, regardless of their previous educational, ethnic, or socio-economic background, to pursue one of 40 self-paced

programs of study while they continue to work at their jobs. WOU established six regional centres that recruit students, provide counselling, and offer access to resources such as a virtual library and a physical library as well as ICT support. The regional centres also serve as a student information hub where students can make inquiries as well as file complaints.

- The ***Botswana College of Distance and Open Learning*** (BOCODOL) provides a variety of certificate, diploma, and degree programs as well as short courses to 8,382 students. The institution has five regional centres plus a network of 79 community study centres that offer all the services itemized above as well as HIV/AIDS support, telephone tutoring, and support strategies for learners in special circumstances, such as prison in-mates. The primary responsibilities of the regional centres are to liaise with the local communities, schools, and other institutions, to market BOCODOL programs, and to provide management information to headquarters.
- The ***Open University of Tanzania*** (OUT) offers degree programs in education, law, business management, arts and social sciences, and pure sciences. Students primarily receive instruction via print materials, e-learning (via Moodle), compact discs, videocassettes, audiocassettes, and face-to-face tutorials. Students receive academic and administrative support from 30 regional centres, 10 coordination centres, and 69 study centres. Nineteen centres have computer laboratories and 12 of these centres provide computer training to the community. By December 2013, all regional centres will provide wireless Internet access. Regional and coordination centres have mini-libraries. Centres are located in rented premises and facilities built specifically for OUT.
- The ***African Medical and Research Foundation*** (AMREF) is an international African organization that aims to strengthen the capacity and capability of health and health-related professionals and institutions. Initiatives include the use of digital learning in the training of health workers in sub-Saharan Africa. In Kenya, AMREF supports more than 100 learning centres housed within health training institutions and health facilities. These learning centres were created to help nurses who were seeking to upgrade their nursing credentials to a diploma while they continued to provide health services at their places of work. These centres offer mentorship, clinical practice and assessment, and access to digital and print learning content.
- The ***African Virtual University*** (AVU), based in Kenya and Senegal, aims to be the leading pan-African open and distance learning network. In order to increase access to tertiary education, the institution enhances the capacity of 37 universities across 26 sub-Saharan African countries to engage in distance and e-learning. The AVU is establishing 37 Open Distance and e-Learning (ODeL) Centres and is training academics in e-learning methodologies. At these centres, learners can access open educational resources in English, French, and Portuguese. Currently, the focus is on teacher education programs for mathematics and sciences, and applied computer science.
- The ***National Institute of Open Schooling*** (NIOS), India provided courses to 493,534 academic and 26,354 vocational students in 2011-12. These students could access 2,931 academic study centres and 1,487 vocational centres. In addition, there are 27 NIOS study centres located in Kuwait, Muscat, Nepal, Qatar, and the United Arab Emirates. At these centres, students can attend face-to-face classes, participate in practical hands-on laboratory/workshop activities, and access course materials and a library. Support services such as counselling, tutorial support, and examination preparation are also provided.
- The ***Indira Gandhi National Open University*** (IGNOU), India, offers 477 educational programs. As of April 2013, 3,016,770 learners were enrolled at the institution (IGNOU, 2013). These learners accessed 67 regional centres, 3,380 learner support or learning centres, and 80 overseas centres in 43 countries. Most of these centres use existing space in a multiplicity of educational institutions. At these centres, students can participate in various academic activities or obtain support in these areas: academic tutoring, counselling, assignment assessment, examination preparation, library, and media/ICTs.

Unless criteria for gauging the operational success of the centre are established at the outset, it will be difficult for institutions to know whether the centre is successful in providing the support its students need. Although tracking the number of students served is a primary consideration, it is also important to measure the type and quality of the support provided and to offer an indication of why some criteria have been not met. For example, learning centres in some African countries may have educational resources, but due to the prohibitive cost of purchasing proprietary course materials and the high cost of transportation, few resources may be available and these resources may be out of date. Thus, few people will use them. Or, learners may attend a learning centre that has computers and Internet access, but students may be unable to use or have limited use of the hardware and software, because these items are under the control of a school principal who is concerned about theft and equipment damage. Consequently, simply recording the presence of resources and equipment available at a learning centre gives no indication of how often they are used or how the equipment is being managed. Similarly, recording the number of people who come to the learning centre does not give an indication of how the centre is used and what future services may be viable.

Community Ownership and Governance

People value something they have a stake in.

If the primary purpose of a learning centre is to meet the needs of the learners within the community, then perhaps the community should be involved with the establishment and operation of the centre so that the community can assume some form of ownership for the centre's challenges and successes. Members of the community may be able to identify the potential benefits, constraints, and opportunities afforded by the initiative. Concurrently, they need to be informed of the benefits, constraints, and opportunities as seen from the centre's perspective.

As institutions and/or governments traditionally pay for learning centres, they often establish learning centres without any local community input. This approach can lead to the establishment of learning centres at sites that may limit the use of the centre. For example, sites may be donated and save the government money, but the sites may be on the edge of town some distance from bus routes and the local market. Hence, students have to make an extra effort to reach them and thus these centres attract few students. Female students, in particular, may not be pleased; the out-of-the-way location and lack of street lighting means they may not visit these centres after work or after a day of shopping at the market. Perhaps involvement by the community could facilitate the selection of better locations for learning centres as members of the community would note issues such as transportation, safety, and visibility.

Communities can demonstrate commitment by:

- assisting with the selection of the centre's location, preferably a site with high visibility that takes into account learner safety and proximity to transportation links.
- donating a room or providing free rent, thereby freeing up funds for additional or better equipment, higher bandwidth, increased staff hours, and so forth.
- providing equipment. For example, Kenyan health facilities are required to provide basic furniture for the computers installed in learning centres and to fortify/secure the room in which the equipment will be held.
- promoting the centre by advocating its benefits to community members.
- raising funds for the centre.
- volunteering to tutor students or perform specific tasks at the centre.
- providing actionable feedback that will help the learning centre staff improve the quality and efficiency of the services provided.

- suggesting the operational hours of the centre that would best suit the members of the community. For example, the WOU regional centres are open until 10 p.m. during the week as well as on weekends to better serve their working-adult clients who are unable to access the centre during regular working hours or until after they have fulfilled family-related commitments.
- participating in the governance of the centre by suggesting services to be offered and addressing the challenges encountered by centre staff.

Governance may require the establishment of a hierarchical management structure comprising a local learning centre committee and a network committee. While the former committee could oversee the operation of a particular learning centre, a network committee could oversee the operation of all learning centres within a region or country. However, if committees must make all the decisions, decision-making will be inefficient. If committees are too large, decision-making is often delayed. Thus, one person may be designated as manager and be responsible for the day-to-day operational decisions so that decisions can be made in a timely fashion. The decision-making structure must be simple and clear to everyone.

Learning centre and network committees may include educational administrators and important community members such as the elder/mayor, key businesspersons, teachers/instructors, and members of the local community/parish assembly. However, it is beneficial to have a balance between decision or policy-makers and those on the ground who actually deal with students and can encourage discussion that focuses on the welfare of learners. It may also be beneficial to have student representatives on these committees, especially if the students are adult learners; adult learners are more likely to be affected by the consequences of decisions made by learning centre and network committees.

Staff and Training

Quality staff is key to the success of the centre.

Staffing a learner centre with appropriately qualified individuals can be a significant challenge, yet quality staff is key to the centre's success. In order to help learners succeed and take responsibility for their learning, learning centre staff must be able to encourage students, to provide a safe environment in which students are treated with respect, and to offer reasonable and ethical support that is mindful of students' privacy. Learning centre staff must be intrinsically motivated to help others.

It can be difficult to find individuals with the necessary people and technical skills to staff learning centres, particularly in rural areas. Preference should be given to selecting staff who display above-average people skills; technical skills such as handling software and hardware may often be taught more easily. But because the successful operation of today's learning centres involves ICTs, it is critical that learning centre staff know how to use them. Those who are organized, technologically inclined or savvy, and have basic accounting skills may help ensure that the centre runs smoothly. Ideally, funds would be handled by a central organization or via mobile phone money-transfer software so that learning centre staff will not be tempted by corruption or susceptible to robberies.

Once learning centre staff are hired, they must be informed about the institution's programs and its admission and registration procedures as well as the services that are offered or could be offered at the centre. Key roles for staff would be obtaining feedback from students and forwarding it to institutional personnel as well as tracking whether or not students' concerns have been addressed. Learning centre staff are often the first point of contact for students during recruitment and for students who want to access counselling services. Staff must have accurate information regarding course enrollment procedures as well as the capacity to advise on the appropriate courses to take if learners want to obtain

a particular accreditation. As institutions introduce new programs, learning centre staff must be trained and kept up-to-date on new courses and program changes. At WOU, workshops/meetings are held throughout the year to inform staff about program changes. At their bi-annual Operation Review Planning Meetings, WOU staff from the regional centres meet with institutional staff from other WOU departments such as Educational Technology and Publishing, Finance, Academics, and the Library to update each other on the latest developments in their areas of responsibility. During these meetings, student-related issues or problems are discussed and solutions generated.

At IGNOU, the Staff Training and Research Institute of Distance Education (STRIDE) develops training strategies and materials as well as organizes continuous training activities for staff who are engaged at all levels of open and distance learning (ODL). STRIDE regularly conducts training workshops and orientation programs for faculty, academic counsellors, regional centre staff, and administrative staff. In order to ensure that IGNOU provides a quality learning experience, STRIDE undertakes program evaluation and conducts research on different aspects of ODL.

It is highly likely that learning centre staff will need training in assisting learners, using ICTs, handling e-learning or online courses, managing centre administration, and handling marketing and entrepreneurial tasks. They may also need to know how to assist students with disabilities. In Sierra Leone, for example, the 1991 to 2002 civil war left many with missing limbs and other forms of physical disabilities. Thus, catering to the educational needs of these individuals can require training as well as specialized resources and equipment. Such training could be conducted with the use of job aids that outline specific "what-if" scenarios as well as online discussion boards that can be used to solve problems. Holding annual meetings and/or workshops could provide staff at one or several learning centres with opportunities to share frustrations and exchange best practices. Staff must be kept up-to-date with institutional policies and procedures, online registration, e-banking, e-government, and e-learning.

Ideally, each learning centre will have at least one paid staff as well as academic counsellors. These counsellors, such as those at IGNOU, may be appointed to serve a particular program and must fulfill strict eligibility criteria based on qualifications and experience. Paying staff appropriately so as to reduce turnover can be a major challenge. High turnover means considerable time needs to be spent on finding and training suitable staff. Volunteers or underpaid staff may at first seem to be inexpensive, but over time they become costly due to high turnover. Also, paid staff may be less likely to accept "gifts" from learners in return for overlooking the submission of late assignments or for providing special access to some students but not others. When staff are poorly paid, they may be more tempted to leave and work elsewhere, particularly after they have acquired knowledge of the ICTs used in the learning centre. This pattern of learning on the job in public institutions and then leaving to work in the private sector is not restricted to developing and emerging nations; it happens everywhere.

An alternative to hiring additional paid staff would be to have managing the learning centre built into the roles and responsibilities of the existing staff. In the Kenyan health sector, registered nurses who have at least a nursing diploma are required to support the learning activities in the health facilities where they work, for no additional pay. However, training institutions that place their learners at these centres may choose to provide token payments to the centre staff for the purpose of motivation.

When learning centres located in public schools cater to postsecondary students, the school principal is likely to supervise the centre and hire the staff. The principal may establish a rigid environment that would be appropriate for young children in a traditional educational setting, but entirely inappropriate for adults, especially adults enrolled in distance learning courses. The principal may also insist that tutors provide mini-lectures to the adult students rather than one-on-one or small group discussions tailored to the

needs of students who are experiencing difficulty with the course material. Thus, institutions such as the Malawi College of Distance Education invite all school principals to a attend workshops where they can become acquainted with the needs and flexibility requirements of adult learners as well as the policies and procedures of postsecondary institutions that offer courses within a learning centre.

Distance learning students will need learning centre support in order to access hardware, software, reference books, study areas, and so forth, but students will also need the personal support offered by learning centre staff. Encouragement and concern for the students' progress in their courses play an important role in motivating distance students. For example, at WOU, personnel at the Kota Bahru Regional Centre provide extra classes for students who are weak in English language skills at no additional charge. Most of the students speak the native language of Bahasa Malaysia, and their poor comprehension of English may have a negative effect on their studies and examination results. The students appreciate the additional help provided by the learning centre staff and many attend the extra English language classes. Such efforts by learning centre staff help the institution to retain students.

Technology: Tools to Help People Learn

Letting the world in, letting the learner out

The two-way capabilities of today's technology enable the world to come to the learner and the learner to reach out beyond his or her environment. Technology has become an essential component of today's educational system. It can facilitate effective and efficient communication and help students to obtain the information they need to succeed. The mere presence of ICTs will not ensure that people learn; people must be shown how to use ICTs so as to obtain the information they seek and to analyze what they find. Obviously, the information and the procedures involved in seeking information must be in a language that people can understand. Currently, "57% of the Internet is in the English language while only 16% of the world's 7 billion people speak any English at all" (Aggarwal, 2013). Wikipedia, for example, offers its content in 286 different languages. However, while four million of these articles are written in English, only 147 articles are in Xhosa, which is the language spoken by almost 8 million people in South Africa (Coughlan, 2013). But as access to technology increases and it becomes easier to use, more articles can, and will be, produced in local languages. One of the functions of learning centres should be producing materials in the local languages.

It is always tempting to be attracted to the latest, "cool new equipment" (Trucano, 2010), or to accept the equipment provided by a non-government agency (NGO) without considering the total cost of ownership which includes maintenance, software upgrades, training, and, most importantly, what the equipment will be used for (Wright, Dhanarajan & Reju, 2009). Learning centre managers should first determine the learning needs of those who will use the centre and the administrative needs of the parent institution, and then select the software and technology that are simple, reliable, robust (Gichoya, 2005), and capable of addressing the needs of their potential users. The equipment provided in UNICEF's Digital Drum (http://unicefstories.org/tech/digital_drum/), which is offered to more than 50 communities in Uganda, is one example of robust equipment that has been selected for operation in a harsh environment. UNICEF provides solar-powered hardware built into metal oil drums so that people in rural areas can accesses education, health, and environmental information.

The type of equipment selected often depends on the availability, affordability, and reliability of local power as well as current and future Internet connectivity. Although, a learning centre may be located in an urban area, it may not be immune to power shortages and Internet blackouts. The National Open University of Nigeria, for example, is located in Lagos, a city with a population of 20.5 million people, yet

the institution experiences “power outages and slow access to online sources” (Okonkwo, 2012). “Two-thirds of the population of sub-Saharan Africa lacks access to electricity, including more than 85% of those living in rural areas” (Karimi & Smith, 2013, June 30). Thus, in June 2013, President Obama pledged US$7 billion to upgrade power in Africa, initially in Ethiopia, Kenya, Liberia, Nigeria, Tanzania, Uganda, and Mozambique as “these countries have set ambitious goals in electric power generation, and are making the utility and energy sector reforms to pave the way for investment and growth” (Karimi & Smith, 2013, June 30). Although Africa will need perhaps US$300 to enable it to provide access to electricity to all of its citizens by 2030, this initial US$7 billion is a welcomed investment.

If the learning centre cannot be connected to an electrical grid and diesel-powered electrical generators are not feasible, then the centres need to obtain equipment that consumes little power and can be run by battery, solar, or wind-based devices. If learning centres are located in regions that experience extreme temperatures, significant rainfall, or dust storms, then their equipment must be designed so as to minimize the potentially adverse effects of heat, moisture, and dust. Selecting hardware that is unsuitable for the environment and requires “high maintenance (recurring) costs for hardware, software, and Internet connectivity (will) put a financial burden on the projects rendering them financially non-sustainable” (van Reijswoud, 2009, p.2). Ideally, “the selected solution should be in harmony with local standards and values and built on existing skills and techniques” (van Reijswoud, 2009, p. 3).

The low Internet penetration rate in Africa hinders accessibility to the Internet (Wright, Dhanarajan & Reju, 2009), but not necessarily to educational opportunities. For example, the eGranary Digital Library, http://www.widernet.org/eGranary/, also known as “The Internet in a Box”, provides more than 30 million offline, educational resources to more than 550 educational sites around the world. These resources, which include 60,000 books, information from 2,000 websites, 250 academic journals, and more than 100 software programs are stored on a hard drive and accessed by those connected to a local network. According to Bakary Diallo, Rector of the African Virtual University (AVU), “Our AVU e-learning model recognizes the challenges Africa faces with Internet connectivity. Our study materials are available online, on CDs and in print, so students have access to the material even if they are not connected to the internet” (Sawahel, 2013). Thus, until a learning centre can be connected to the Internet or have reliable bandwidth, it is still possible to provide students with access to the learning materials they need. A learning management system (LMS) can be used to track the access and use of the material as well as the performance of students (Wright, 2006).

Even if access to a reasonable level of Internet bandwidth and reliable electrical power are not major concerns, as is the case for WOU students in Malaysia, there is still the need to provide educational resources in a variety of forms. WOU believes in lifelong learning and the need to expose learners to a variety of digital products. Consequently, WOU provides course materials in multimedia (Flash) and e-book (PressBook) formats. Thus, regional centre staff need to be well-versed in the use of technology so that they can assist students effectively.

At IGNOU, learners can access a variety of media content, including resources and lectures delivered via cassettes, compact discs, teleconferencing, videoconferencing, television, FM radio, and webcasting. The Electronic Media Production Centre (EMPC), produces, distributes, and transmits educational content to serve the needs of learners and staff at a variety of education and training institutions as well as government departments and corporate entities. The learning materials that are developed for IGNOU by EMPC are accessible to students at IGNOU learning centres. Students may also access online virtual classrooms, the open course portal called Flexi Learn and eGyanKosh which is a national digital repository for preserving, storing, and sharing materials developed by ODL institutions located across India.

Since today's desktop and laptop computers can perform a variety of functions, it may no longer be necessary to have dedicated devices to perform specific tasks. For example, dedicated audioconferencing and/or videoconferencing equipment may no longer be needed as laptop computers and smart mobile phones can handle these functions. "In parts of Africa, the mobile phone as a device has displaced nearly every other form of communication and computing (Horn, 2013)". However, the size of the video image on a mobile phone can be a significant limiting factor, as it is difficult to examine details and only one person at a time can view the image. Irrespective of the equipment selected, running open-source software on it may also be beneficial; open-source software is likely to be less expensive to obtain and maintain than proprietary software and open-source software can be altered to suit local needs (Wright & Reju, 2012).

Regardless of the location of the learning centre, whether Southeast Asia or sub-Saharan Africa, there seems to be a tendency to place computers so close together that students have no place to write notes or refer to a book as they work. Learning centre designers should provide enough space on computer desks so that students can place an open book on one side of the computer and a pad of paper or notebook on the other.

Security and back-up arrangements for equipment, files, and online information must be established as well as procedures for maintaining and upgrading software and hardware. Thoughts about security or back-up procedures may not occur until lightning strikes and disables a device or wipes out a file, or an item is stolen. Or, perhaps nothing concrete is stolen, but private information is taken and shared resulting in personal inconvenience and/or embarrassment. Conversely, some learning centre managers are so concerned that their equipment may be damaged or stolen that they take it home with them or restrict student's access to it. Unfortunately, their concern for security prevents students from using these devices for educational purposes.

The success of any educational program involving technology is highly dependent on the capabilities, confidence, and enthusiasm of the staff at the learning centre. Based on the experiences of AMREF and WOU, there is a need to ensure that learning centre staff are able to use the technology and to re-orient learners who may be accustomed to traditional classroom instructional methods. Failure to properly train leaning centre staff and to re-orient learners to different instructional/learning methods may lead to negativity and the eventual failure of the distance learning program and the centre.

Data Collection and Research

Without data, how do you know if the centre is a success?

Data is needed in order to help determine whether or not the centre's goals have been met, to justify the continuation of the centre, and to plan for the future. As learners' needs may change, one needs to evaluate the relevance of programs offered and the operation of learning centres. Hence, relevant data must be collected and analyzed. Data can be collected in paper or digital form, from:

- basic student information (e.g., name, age, and gender);
- courses being taken;
- activities performed while at the centre;
- time spent in the centre;
- feedback (i.e., compliments, suggestions, and complaints);
- problems encountered and how they were addressed;
- observations of those working in the centre; and
- the course completion rates of students.

In addition to the above, the Open Source Education Management Information System (OpenEMIS, http://www.openemis.org/) developed by UNESCO can be used to compile information about students, instructors, resources, finance, and learning outcomes. This information could be compiled weekly, monthly, and/or quarterly and then analyzed at the local, institutional, and/or network level. One way to determine the type and regularity of the data to be collected could be determined through community/stakeholder participation. Different stakeholders (e.g., professional accreditation bodies or training program regulators, the educational institution, and the donors who support the program) may all require different information. Once the data has been collected and compiled, the commonalities and differences among centres could be noted in the attempt to obtain a clear picture of the effectiveness of the centre(s). Perhaps there were lessons learned that could be incorporated into the operation of existing and future centres. A review of the data may also reveal how the presence or lack of a particular service contributed to learner success.

As part of the evaluation process, the key question that needs to be addressed is "What is the impact of the learning centre on the lives of the students and the community?" To answer this question with any degree of accuracy requires not only collecting the information noted above, but also interviewing students and non-users of the learning centre, and obtaining information from the community about what they perceive its impact to be. This information could be collected and analyzed using Donald Kirkpatrick's (Kirkpatrick et al., 2011) model of evaluation as a guide. Examining, for example,

- the perception of the users, both the learning centre staff and the learners about the operation of the centre and the program(s) being offered;
- the acquisition of skills and competences and the academic performance of the centre's learners, as compared to learners in regular, traditional classes at the main campus of the institution;
- the degree to which learners apply the training and/or skills they have acquired when they return to their jobs;
- the impact of the learning programs. In the case of nurse training, for example, has there been a change in established health indicators? Have infant mortality levels declined? Have the rates of HIV/AIDs declined?

Without some form of evaluation, it would be impossible to ascertain with any certainty the success of the learning centre, to make modifications to the operation of the centre, or to chart the future of the centre.

The Educational Technology and Publishing Unit of WOU conducts a student survey every semester (twice a year) to obtain student feedback on matters such as the availability of resources, the level of customer service provided, and potential improvements to the centre's operation. The student survey, which is a compulsory exercise, is conducted online and comprises a series of multiple-choice questions and several open-ended written questions. The students are required to complete the questionnaires before they can submit their final assignment online. Consequently, there is a high rate of return and the institution is able to compile a plethora of constructive suggestions to improve the operation of its facilities. However, some suggestions made may be beyond the capacity of the university or need further consideration before they could be implemented. For example, WOU students have asked that the operating hours for the WOU regional centres be extended from 10 p.m. to midnight. This request has significant financial, staffing, and security implications that the institution must addressed before it can make a change in operating hours. The information obtained from the student survey is extremely valuable to the institution; it is an important instrument by which WOU can monitor the needs of students.

Marketing

"**Build it and they will come" does not apply to learning centres.**

The presence of a learning centre in a community does not mean that it will be used. Learning centres, institutions, and programs must be marketed and the benefits of the centre proactively sold. Marketing strategies could emphasize the need for, and benefits of life-long learning or the potential impact the centre could have on members of the community once they become aware of new ideas and developments beyond their community. In sub-Saharan Africa, only 6% of school learners enter tertiary institutions; but, in order to sustain a country's economic development, 12% to 15% of the workforce needs to have tertiary education (Diallo, 2013). Not only will individuals benefit if they receive an education, but so will their nation.

Although people may recognize the benefits of an educational program, they may not be able to pay for the program in the traditional manner. Instead of making one large payment upfront for each semester or academic year, learning centres might consider implementing "pay-as-you go models, where students only pay for one course at a time" (Trucano, 2013) via mobile phone payment systems. Thus, students would be able to pay as their finances permit. This feature and other benefits of using the centre must be marketed.

In order to market learning centres effectively, institution need to know what people want and why non-users would avoid the centre. Perhaps the gaps between what people want and what the centre offers could be filled using available resources, but unless data is gathered and members of the community provide their comments and input, it is difficult to know what action to take. Community leaders, such as elders and members of the district assemblies, can be recruited to obtain community feedback and to help promote the centre. Learning centre staff can obtain direct feedback from their users and make adjustments that are ethical and comply with institutional regulations. Unless some of the suggestions made by students and members of the community are implemented, it will be difficult for them to trust in those who operate the learning centre. Once that trust is lost, it may be hard to regain.

At IGNOU and WOU, the staff at the regional centres play an important role in marketing the university and recruiting students. Advertisements in print and electronic media and advertorials of educational products are the norm in India and Malaysia. But the personal touch required to engage students depends very much on the efforts of the centre staff. The staff provide information about the programs being offered and advise prospective students about suitable programs based on individual needs and career paths. Easy-payment methods are also described. To attract potential students, WOU organizes Open Day(s) several times during the year and to enable working adults to attend the event, the Open Day(s) usually occur on the weekends. Open Days are supported by all the schools or academic divisions within the institution and the deans conduct presentations and answer questions. During these Open Days, or external education fairs, centre staff can obtain feedback that will help WOU shape its future strategy so as to remain relevant in the education market.

Even though community learning centres that offer informal educational opportunities are established and managed by local people, these centres must also be marketed. In Asia, a variety of means are used to encourage community members, especially women, to access the resources and services at the centre. For example, community learning centres may organize or take part in community fairs, debates, educational games, street plays, and rallies that focus on the value of education. Significant effort is required to ensure that all members of the community are aware of the role the centre plays in the life of the community.

Integrating Functions: Learning Centres and Public ICT Access Points

Initially, learning centres were established to provide support to students of a particular institution or group of institutions. However, where resources are limited, it seems reasonable to combine the functions of a learning centre with those of a public ICT access point. Thus, one centre can provide learning opportunities, ICT access, and information to a wider audience and thereby reduce the digital divide between those who can access information and knowledge and those who cannot. Although the penetration of the Internet in Africa is low by world standards, based on the Internet World Stats (http://www.internetworldstats.com/stats.htm) website, "more than 167 million people now have access to the Internet in Africa and the continent's growth rate in Internet penetration is among the highest in the world" (Sawahel, 2013).

Since the late 1980s, a variety of organizations have invested in building and supporting ICT access points or telecentres in Africa, Latin America, and Southeast Asia. These organizations include the International Development and Research Centre (IDRC) of Canada, International Telecommunication Union (ITU), Microsoft, United Nations Educational, Scientific and Cultural Organization (UNESCO), United Nations Development Program (UNDP), United States Agency for International Development (USAID), and the World Bank. Since 2003, there has been increased effort to use telecentres to improve and sustain livelihoods as "the ability for all to access and contribute information, ideas, and knowledge is essential in an inclusive information society" (World Summit on the Information Society, Principle 24, 2003). Telecentres provide "critical services to more than 1.5 billion people every day, and it is estimated that by the end of this decade, they could reach over 2 billion people" (Raimilla, 2012).

Although many countries have national ICT plans that focus on ICT access for everyone, there is and will continue to be a need for services offered by telecentres. For example, in the *Connected Kenya 2017 National ICT Master Plan* (Kenya ICT Board, 2012) which focuses on education and training, health, water and sanitation, environment, housing and urbanization, gender, youth and vulnerable groups, social equity, and poverty reduction, the success of the plan depends on "every citizen, resident, home and institution (being) connected through countrywide robust, accessible and affordable ICT infrastructure" (p. 8). The infrastructure is not planned to be in place until 2030, when the "last mile" of connectivity from the ICT pipelines to individual homes and small businesses will occur. Until then, people will need to use telecentres, especially in rural areas.

Integrating the functions of learning centres and telecentres to create knowledge hubs may be advantageous as students registered with specific institutions and members of the general public can use the same resources and facilities. However, new challenges emerge that must be addressed. Combining universal access to ICTs and learning opportunities at one centre is likely to lead to a discussion about ownership, sustainability, and entrepreneurial efforts. A few of the discussion threads are provided below.

- ***Determine conditions for success***. What conditions must be in place for knowledge hubs to succeed in rural areas? Often, key stakeholders must invest or have a concrete interest in the centre for the centre to succeed (Vaughan, 2006). What form of investment is acceptable and how much ownership should each party receive for their investment? Who will make the decisions and how will they be made?
- ***Ascertain the amount people are willing to pay***. How much of their limited income will people be willing and able to spend on ICT services? Those who are marginalized may need access to services the most, yet they are the least able to pay for them. (This issue will be discussed in more detail later in this article.)

- ***Establish partnerships***. How much control over the knowledge hubs would institutions, governments, or non-government organizations (NGOs) be willing to give up to allow for effective public-private partnerships? The different perspectives of partners in public-private partnerships must be appreciated. Perhaps they could start small, then expand the relationship as tangible actions are taken and issues are resolved. Partnering with a local entrepreneur who already has a successful telecentre business is one option that could be seriously considered.
- ***Find managers***. How difficult will it be to find knowledge hub managers who can operate in a public-private environment? Regardless of who is hired, these managers must be capable of making decisions as the needs of the community change, and managers will need ongoing training and support.
- ***Differentiate service***. How can knowledge hubs differentiate themselves from the services offered by local entrepreneurs so that both types of ventures can survive? In smaller communities, it is likely that both groups would target the same people. Knowledge hubs and local entrepreneurs could provide different types and levels of service. They may also have different operating hours. Knowledge hubs could offer computer literacy sessions (such as searching the web and sending e-mail) for free, but not offer business applications such as using spreadsheet software. Or, the hubs could charge for sessions covering business applications.

Although public-private partnerships as described above are feasible, public-public partnerships are also possible. Perhaps learning centres and post offices could be integrated; post offices are situated in many communities and they have access to government information that citizens need and want (International Telecommunication Union and Universal Postal Union, 2010). In Botswana, Kitsong or knowledge centres, have been established at a number of postal offices. The services they provide include photocopying, printing, desktop publishing, computer training, and agricultural and health information.

Of primary concern among those who establish knowledge hubs or centres is how will these hubs be sustained, and how will those who are marginalized be able to afford to use them? A few approaches to addressing these questions are provided below.

- ***Motivate users***. The more people who use the knowledge hub, the greater the chance that the hub can be sustained. Providing services to those who have limited ability to pay is a significant challenge (Ariyabandu, 2009). However, as people benefit from the centre, their ability to pay may increase. The proportion of their limited income that they would be willing to spend on services offered by a knowledge hub is unclear and will vary from community to community. Consider, however, that in 2000, few people in Africa could afford mobile phones, yet 64% of Africans have access to mobile devices (Horn, 2013). What will motivate non-users to become users and to pay for services? Experience suggests that people will use centres from which they receive reliable information and assistance that addresses their needs.
- ***Employ two-stage implementation process***. Perhaps governments and NGOs should establish the learning centres, and then turn them over to the private sector as has been suggested in Rwanda (The New Times, 2012) and elsewhere. Or, governments could provide the Internet and/or electrical connectivity and the local community organizations and businesses could contribute the funds required to operate the centre. However, in extremely poor areas, paying for new hardware will be a challenge. Although the price of digital hardware is declining, it still may not be affordable to those who are marginalized. Thus, the African Development Bank, the World Bank, NGOs, and equipment manufacturers may still need to make contributions towards the purchase of hardware.

- ***Develop entrepreneurial skills***. Although funding from government and NGOs may be necessary, this arrangement could inhibit the entrepreneurial spirit – the spirit needed to keep the centres going once external funding or subsidies have been removed. Knowledge hub staff must be given the opportunity to learn and develop their entrepreneurial skills before base funding is removed.
- ***Use open educational resources*** *(OERs)*. To reduce the operating costs of knowledge hubs and the costs incurred by users, OERs rather than proprietary resources should be accessed more frequently. OERs are teaching, learning, and research resources with intellectual property licenses that allow them to be reused, reworked, remixed, and redistributed (Downes, 2011; Plotkin, 2010). Although users may need to pay for the computers to access them, OERs are freely available and their only cost may be for duplication, that is, the cost associated with transferring the resource to another format.

Ideally, knowledge hubs can sustain themselves by charging for the services they provide and by receiving a share or percentage of the business they conduct on behalf of private enterprises and the government. The Siyafunda Community Technology Centres in South Africa have succeeded because of their "close collaboration and clearly defined working relationships between government agencies, educational institutions, businesses and community organisations … (thus) resources and costs are shared… this helps to ensure that communities get the services they need, at a price they can afford, and from a centre that is likely to be around for the foreseeable future" (Ismael, 2012). However, it is questionable whether all centres can ever be completely financially sustainable given their locations and the low-income communities they may serve (Gurstein, 2011). Centres have a better chance of sustainability if they have some form of community participation and/or ownership, if they provide services and content needed by local residents, and if those who set up the centres take the long view, which is that an informed populace will lead to economic and social prosperity.

Regardless of the type of partnership involved in establishing and operating a knowledge hub, decisions must be made about who will be responsible for what. For instance, who is responsible for:

- staffing and training,
- supplies/inventory,
- hardware,
- maintenance,
- software upgrades,
- equipment replacement,
- security,
- insurance,
- upgrades to facilities, and
- paying the bills such as those for electricity and Internet access?

Most importantly, who is responsible for making decisions and how will these decisions be made? The decision-making process must be clear to all and easy to follow. While involving representatives from all stakeholders groups in the process may be ideal, decisions must be made in a timely, flexible, efficient, and effective manner.

In a traditional telecentre, a mix of technology-focused services may be offered, including:

- audio or telephone communication
- facsimile machines (fax)
- lamination
- mobile phone airtime sales
- mobile phone charging
- photocopying
- printing
- television viewing
- typing services
- videoconferencing
- computer literacy
- computer-enabled services such as e-mail, web browsing, and e-government

However, knowledge hubs or the next generation of telecentres must provide more than just access to equipment. They must also take into account “the rapid diffusion of mobile technologies” (Economic Commission of Africa, June 2011) and the increasing rate of change in the ICT industry. In Zimbabwe, for example, the average cost of mobile phone usage was US$0.27 per minute in 2009, but just US$0.09 per minute in 2012. “The minimum cost of a cell phone dropped from US$250 to US$15, while a SIM card cost US$200 in 2009, as opposed to US$2 in 2012” (Ngwenya, 2012). Thus, today’s telecentres and knowledge hubs must provide more than audio communication as many people now have their own personal phones. Instead, knowledge hubs must provide services that people express a need for, services people are willing to pay for, and services that can be provided in a reliable manner.

In addition to the services mentioned earlier, knowledge hubs could provide services in the areas listed below.

- ***Agriculture and Fishery-Related Services***
  - Agricultural information that can lead to better land utilization, high-yield crops, and healthier animals
  - Documentation service that enables locals to record agricultural practices in a multimedia format and share with others. (This service is currently provided by the Ugunja Community Resource Centre, Kenya.)
  - Fisheries information (e.g., best time and place to market fish)
  - Food security
  - Insurance for cattle and crops
  - Market prices of local produce in order to improve income for farmers and help them avoid exploitation by middlemen
  - Veterinarian advice

- ***Climate***
  - Climate change adaptation – how locals can mitigate and adapt agricultural and fisheries activities to the changing climate (e.g., desertification)
  - Disaster warnings and preparedness (e.g., approaching typhoons and tsunamis)
  - Weather reports

- ***Education***
  - Computer-assisted instruction (CAI) offered off-line via compact or digital video discs (CDs or DVDs) covering a variety of subjects such as financial and business skills
  - Computer literacy and ICT training for personal use and to meet needs of employers (e.g., international computer driving license)
  - Educational and training bursaries and loans, i.e., funding sources for those who want to enroll in an educational program
  - Radio service, i.e., providing information in the local language to those who lack Internet connections
  - Virtual libraries
  - Vocational training for dropouts

- ***Empowerment***
  - Community empowerment enabling locals to make better decisions, feel less isolated, and help with the integration of war returnees in countries such as Uganda
  - Development of resources in the local languages
  - Opportunities for women

- Support services for women (e.g., help them to develop skills, to learn about their legal rights, and to obtain small loans)
- Youth empowerment and guidance

- ***Financial Services and Entrepreneurship***
  - Business skills, i.e., how to start, manage, and grow a small business
  - Entrepreneurial skills and innovation
  - Financial transactions (e.g., money transfers, microloans, and bill payments, such as telephone and electricity bills)
  - Jobs, providing information about employment opportunities and how to become self-employed
  - Management skills
  - Rural banking

- ***Government Services***
  - Access to government regulations and forms such as those needed to register births, deaths, and marriages
  - Computerized land records
  - Government tenders and specifications
  - Online access to e-government services (e.g., e-Government Portal of Tanzania, http://www.egov.go.tz/ which provides a one-stop centre for public services)
  - Petition service enabling citizens to seek acceptable solutions when they feel government officials have treated them poorly. (This service is currently offered by the Sustainable Access in Rural India (SARI) Network in Tamil Nadu, India.)
  - Postal services
  - Social welfare
  - Tax payment

- ***Healthcare***
  - Contact list of healthcare providers and healthcare advice, especially about HIV/AIDs
  - Disabilities assistance, i.e., how to help people with disabilities
  - Health insurance
  - Nutrition information about local food and what constitutes a balanced diet
  - Telemedicine

The services offered by knowledge hubs need to match the conditions and environment in which they are located, and they must be delivered in a reliable manner that meets the users' expectations. A survey conducted by the Rwanda Telecentre Network (RTN) in 2010 indicated that, "Rwandans were reluctant to use telecentres because they were not perceived as useful" (RTN, 2013). Also, the services provided may not have been delivered consistently, which may have been due to erratic electrical power or to the limitations of untrained staff and human error. Nevertheless, the users' expectations were not being met and so they gradually stopped going to the centres. Knowledge hub managers must be concerned not only with the number of people they serve, but also with the quality and reliability of the services offered.

In India, telecentres are becoming increasingly sustainable by providing services members of the community want (Hajela, 2010). As part of its National e-Government Plan, the Government of India established Common Service Centres (CSC, http://csc.gov.in/) that provide government to citizen services primarily to rural and remote locations. At CSCs, people can access services related to

agriculture, banking, education, health, tele-medicine, insurance, pension, and bill payment. Each CSC is operated by Village Level Entrepreneurs (VLE) who are appointed by State Designated Agencies (SDA) through a bidding process. Thus, India has established a public-private partnership framework to provide ICT-related services to its citizens.

In countries such as Mali, the non-users of telecentres and/or knowledge hubs are likely to be illiterate with little or no formal education, and mainly women (Royer, 2013). Non-users are also not likely to have ICT skills or major world language skills that would enable them to access and understand online content. They may lack a tradition of reading and prefer verbal communication (Ogwe, 2009). Thus, assistance and training must be provided in the local language and often in a verbal form. Non-users may also be concerned that information obtained via computers might affect their cultural beliefs and values. Information that is appropriate for an industrialized country, may be inappropriate for a developing one. Consequently, staff in knowledge hubs and community learning centres may need to mitigate this fear or concern about imported content and show users how new ideas can be adapted and incorporated into the lives of community members. They may also want to help users develop content that would be of benefit to the local community. Many non-users may not have the funds to pay for the services offered, but it is surprising what people are willing to do in order to use mobile devices – some will reduce spending on other items; some will skip a meal (Kelly et al., 2013).

If the public is made aware of the capabilities and potential benefits of the knowledge hub, it is likely that more members of the community will use the hub and access its services. They will make the effort to travel to the hub and pay something for its services. In some rural areas, a few people may bring questions and e-mails to the hub from many members of the community, and then return to the community with responses to those questions and e-mails. It is quite possible that people in rural areas will share the cost of obtaining knowledge hub services in much the same way they may share the cost of a mobile phone. It is essential that a balance be found between the sustainability of the knowledge hub and its affordability for the users. It is important to keep in mind the long-term impact of providing access to technology: “Improved access to technology in Africa is leading to more efficient, more responsible business practices and growing entrepreneurship” (Horn, 2013). It is also leading to improved health and increased educational opportunities (Trucano, 2007). The effective use of technology can have a positive impact on the social and economic well-being of individuals; consequently, the living standards of the community will rise over time (Bloom et al., 2006).

Knowledge hubs should be part of a network so that they can share best practices and expertise, develop shared content, collectively negotiate for better equipment and connectivity costs, conduct research, advocate for those who are marginalized, share risk when new initiatives are launched, and provide flexible, ongoing training, particularly that related to ICT developments and managing a business. It is advantageous for networked learning centres and knowledge hubs to use common software and hardware platforms, but in order to serve the needs of the local users, centres should function independently as each must operate in a unique environment. A few examples of knowledge networks are provided below.

- ***Asia-Pacific Teleconference Network*** (APTN, http://www.aptn.asia/), a collaborative initiative of United Nation’s Economic and Social Commission for Asia and the Pacific (ESCAP) and telecentre.org, focuses on strengthening “the capacity of ICT access points to provide, develop, organise, share and disseminate knowledge for the sustainable development of marginalised communities” (http://www.aptn.info/index.php/2012-12-22-05-06-32/mission-vision). The organization facilitates advocacy, training, production of materials, and pooling resources.

Country members include Bangladesh, Cambodia, India, Korea, Pakistan, Philippines, Sri Lanka, and Thailand.

- ***Southern Africa Teleconference Network*** (SATNET, http://www.satnetwork.org/) fosters the "increased use and integration of ICTs as enabling tools to facilitate regional development and achieve overall social and economic development including achievement of Millennium Development Goals (MDGs) in Southern Africa" (http://www.satnetwork.org/index.php?option=com_content&view=article&id=69&Itemid=34). The network focuses on training telecentre managers, providing online materials and advisory services, conducting staff exchanges, sharing experiences, maximizing resource utilization, facilitating research, and jointly planning innovative projects. Country members include Botswana, Congo DR, Malawi, Mozambique, South Africa, Tanzania, Zambia, and Zimbabwe.
- ***Telecentre.org Foundation*** is an international community whose mission is to "increase the social and economic impact of information and communication technologies in communities around the world by serving as a hub for knowledge sharing and collaboration among telecentre stakeholders, and creating opportunities for individuals and communities through relevant training, content, linkages, and services" (http://www.telecentre.org/who-we-are/).

Through its five regional economic commissions, the United Nations is encouraging the formation of knowledge networks in order to promote the sharing of knowledge and experience and to prevent people from "re-inventing the wheel". Stand alone learning centres and telecentres in developing and emerging nations are more likely to succeed if they evolve into multi-faceted knowledge hubs, which are linked to similar hubs so that knowledge, resources, experience, and risk can be shared.

Keys to Success

Serve your learners, involve your community, set reasonable expectations, select and train quality staff, employ technology effectively, market the centre, collaborate, and evolve

Without learners, no one would have a job in the educational system. Thus, the focus should always be on helping learners to succeed. Learners should be supported in any way that is reasonable and ethical. Centre staff must play a variety of student support roles and may need to act as intermediaries for those who lack computer literacy and world language skills.

Many decisions should be made locally. People value the things they have a stake in; thus, the community should be involved in dealing with the social/cultural, economic, and political factors that affect the operation of the learning centre. Decisions made by a governing body or learning centre committee will affect learners; thus, those who work directly with the learners or are learners themselves should be part of the committee.

Reasonable expectations must be set and defined clearly. Expectations should have some likelihood of achievement. Data should be collected and analyzed on a regular basis in order to determine whether the expectations have been met and how the operation of the centre could be improved. Although some centres or knowledge hubs may be located in communities where people have limited ability to pay, it can be surprising what people may be willing to do in order to obtain the information or training that may alter their lives and the lives of their families.

The selection and training of quality staff is essential to the operation of a learning centre. Regardless of its location or how well-equipped a learning centre may be, it is the people who work there who determine the success of the centre. Centre staff not only provide information about an institution,

register students and receive assignments, they also provide encouragement and technical support. Because the staff represent the institution as well as the learners, they must be trusted by both the learners and the institution. Taking care of their professional development through continuous training opportunities will enhance the quality of service provided by learning centre staff.

Technology that is appropriate for the environment must be used effectively for the delivery of information and learning, and for administrative tasks. The successful use of technology is highly dependent on the capabilities, confidence, and enthusiasm of the centre staff. Those new to technology must find innovative ways to use it and to craft resources that they and their community need.

In order to thrive, learning centres must be marketed – the capabilities and potential benefits of the centre to the individual and the community should be succinctly outlined. Centre staff need to know what the members of the community want and why people may not be using the centre. The community must be engaged in marketing and planning for the centre's future.

By learning from and collaborating with others, gaps between ideas/plans, implementation, and expected outcomes may be addressed. Through collaboration, centres can share best practices and expertise, develop shared content, collectively negotiate for better prices for equipment and connectivity, conduct research, advocate for those who are marginalized, share risk when new initiatives are launched, and provide flexible, ongoing training.

The world changes. Technology changes. People's expectations change. Thus, learning centres and telecentres must change as well as evolve. Stand-alone learning centres and telecentres may need to transition into multi-purpose knowledge hubs that can become catalysts for change and lead to the achievement of national and international goals such as the Millennium Development Goals.

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