

**UWI Open Campus Technology:
Seamless Integration for Effective Online Delivery**

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ABSTRACT

UWI Open Campus Technology: Seamless Integration for Effective Online Delivery

The University of the West Indies Open Campus is an amalgamation of the previous Office of the Board for Non-Campus Countries & Distance Education (BNNCDE), the School of Continuing Studies (SCS), the UWI Distance Education Centre (UWIDEC), and the Tertiary Level Institutions Unit (TLIU). The Open Campus (OC) is a virtual campus providing many of its programmes online using Moodle as its primary means of providing distance education through a service called The Learning Exchange.

This case study will show how The Learning Exchange is integrated with the Open Campus other online services to provide innovative and cost effective ways to deliver content, and support our online students.

Leveraging free and open source technologies The University of the West Indies Open Campus is able to connect with, and engage students in the most remote locations within, and outside the Caribbean region. Technologies such as:

- Google Apps
- Mahara - e-Portfolio Tool,
- The OCMS - Student Management System, (which is custom-built, on open source technologies).

Are integrated to form, a single Open Campus system.

This tight integration includes services such as class allocation automation for students, dynamic student dashboards, the provisioning for services such as email through Google Mail, and single sign on services that allow the student to move through the Open Campus systems seamlessly.

Finally, this case will also examine the structure of the Open Campus delivery department, and show how technologies aided in management and support of our online users.

INTRODUCTION

Caribbean countries, lead by the University of the West Indies, Open Campus (UWIOC), now accept e-learning as part of higher education within the region. The Open Campus transformed the traditional face-to-face delivery, to an online mode of delivery. Student now access programmes and degrees anywhere, anytime, and are no longer constrained by location.

Setting up such a delivery structure requires many different systems and processes to work in sync, and with over 20,000 students throughout the region, these systems must also be optimized for efficiency.

Although The University of the West Indies has been around for over 60 years, with three traditional campuses, in 3 countries (Mona - Jamaica, Cave Hill - Barbados and St. Augustine - Trinidad & Tobago), the 4th virtual campus, the Open Campus, was only established in 2008. The same year the world experienced a financial crisis and global recession. In-order for the campus to stay competitive, and supply the online programmes and courses to the Caribbean islands, it had to take innovative steps to continue its virtual operations. This paper will show how the University of the West Indies, Open Campus through tight system integration, good organizational structure, and clear processes, addressed and met the needs of our stakeholders (as shown in figure 1).

The paper will also focus on the efficient structure of the Academic Programme and Delivery (APAD) Department, and show how their structure resulted in cost effective stakeholder satisfaction.

Internal and External

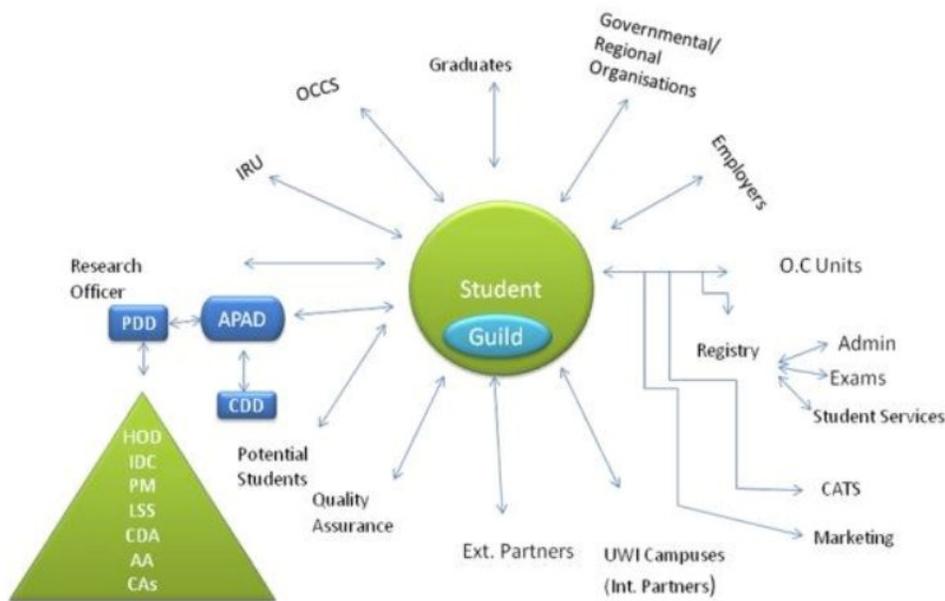


Figure 1 – Identified Stakeholders

THE ORGANISATION

The first model

On launch the original structure of the Academic Programme and Delivery (APAD) department had a single director, and comprised of four main departments;

- The Graduate Department
- Undergraduate Department
- Pre-University & Professional Programmes (Pre-U) Department
- Special Projects Department

The Graduate Department handled all the graduate related programmes and their development, while the Undergraduate Department handled all the undergraduate related programmes and their development. The Pre-University & Professional Programmes Department, handled all other pre-university programmes, which included associates degrees, certificates and diplomas. The Special Projects at the time managed all new and external programmes. The special projects also housed the core delivery support units; these included, the course delivery section, and the learning support section.

We Need to Scale

Realizing the previous model offered limited scaling potential; especially in course and Programme development it had to be revised. The departments had to be transformed into functional units versus the original academic structure. The Programme Planning (PPD), Course Development (CDD), Programme Delivery (PDD), and IT Academy, were established (as shown in figure 2).

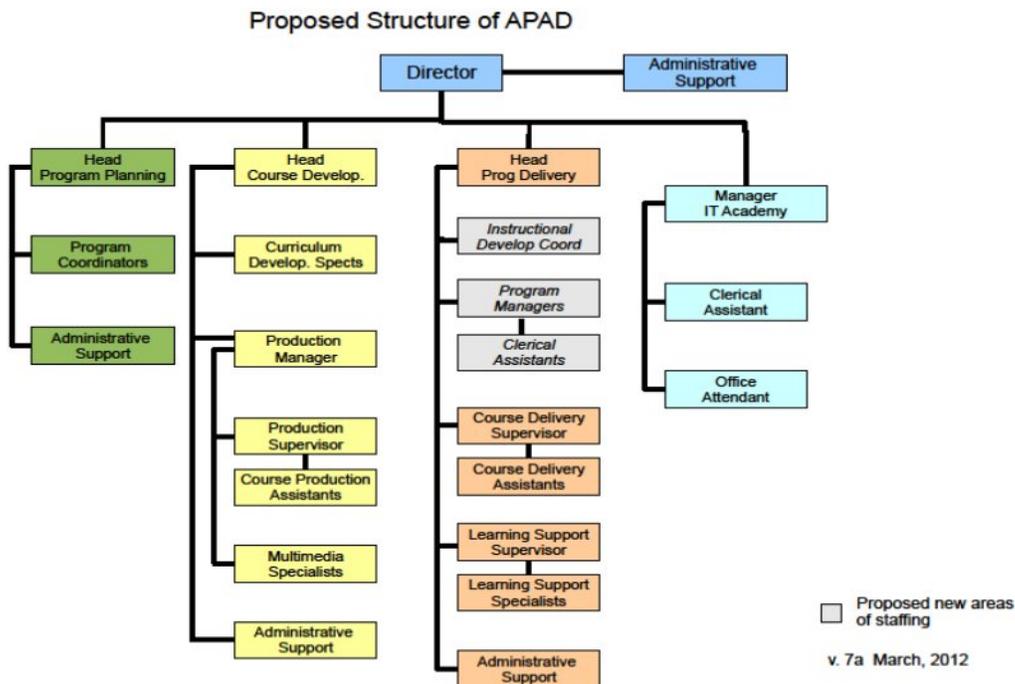


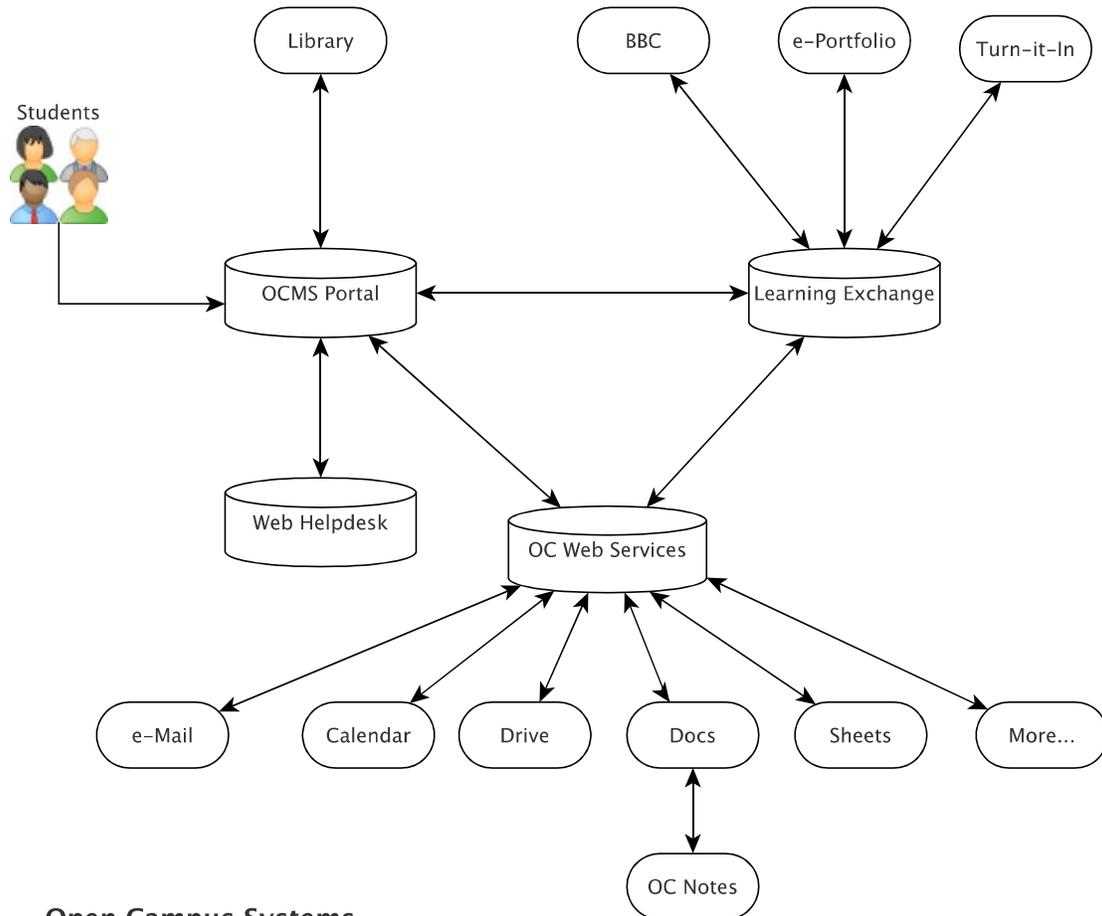
Figure 2 – Proposed Organizational Structure During Transformation

Putting It All Together For Delivery

The structure was in place; APAD now had the resources to marry technology with processes. The staff of the Programme Delivery Department (PDD) conducted internal workshops, both face-2-face and online. Using historical data, the department moved to an in-service model where a complete delivery service culture was adopted. All sections of the Programme Delivery Department (Instructional Development Coordinator (IDC), Programme Manager (PM), Course Delivery (CD), and Learning Support (LS)) would use the current systems and infrastructure to enhance the user online experience, at all levels.

THE OPEN CAMPUS SYSTEMS

An array of free and enterprise systems, allow for successful delivery and support of online courses. The students access these systems using single-sign-on (SSO) technologies, where they move seamlessly between applications and resources.



Open Campus Systems

Figure 3 – The UWI Open Campus Systems

These system technologies include, free open source systems and enterprise applications.

1. Free Open Systems

- **Open Campus Management System (OCMS)** – This is the Open Campus student administrative system. It was designed, developed and built in-house using open source LAMP (Linux, Apache, MySQL and PHP) technologies, and is the first point of entry for students (<http://my.open.uwi.edu>).
From the student dashboard (shown in figure 4) users can access their; Registration, Examination, Financial, e-Mail, Timetable, Announcements, UWI Libraries, Helpdesk etc.

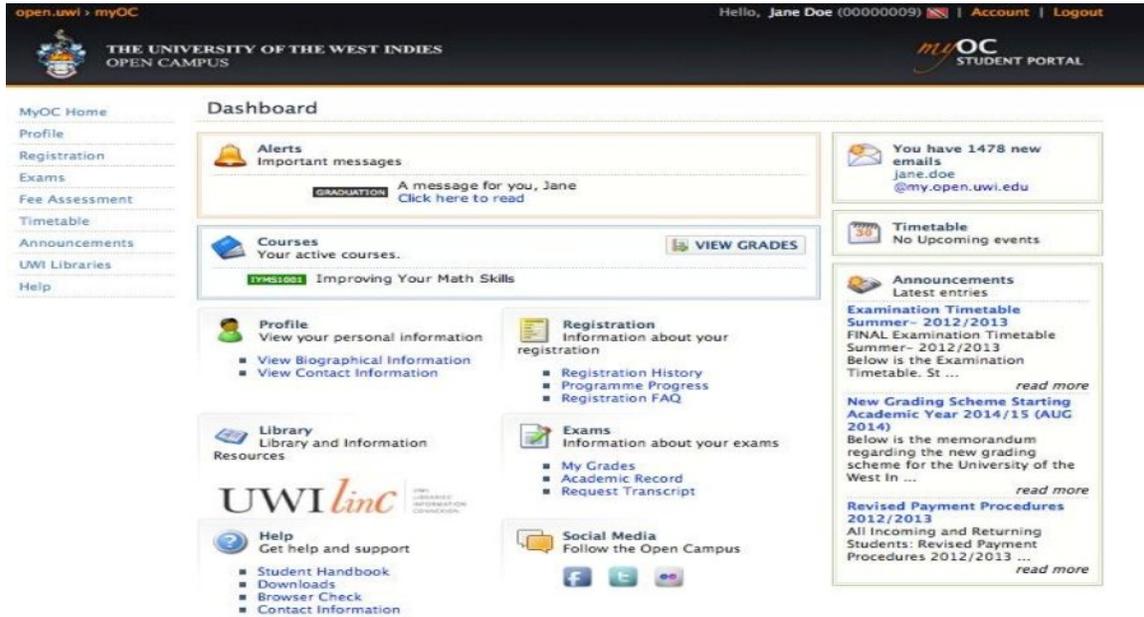


Figure 4 – UWI Open Camus Student Dashboard

- **The Learning Exchange** – This is an open source course management system (Moodle), used for course delivery. The interface is fully customized and integrated with all other Open Campus systems.
From here facilitators deliver course content and manage assessment tools.

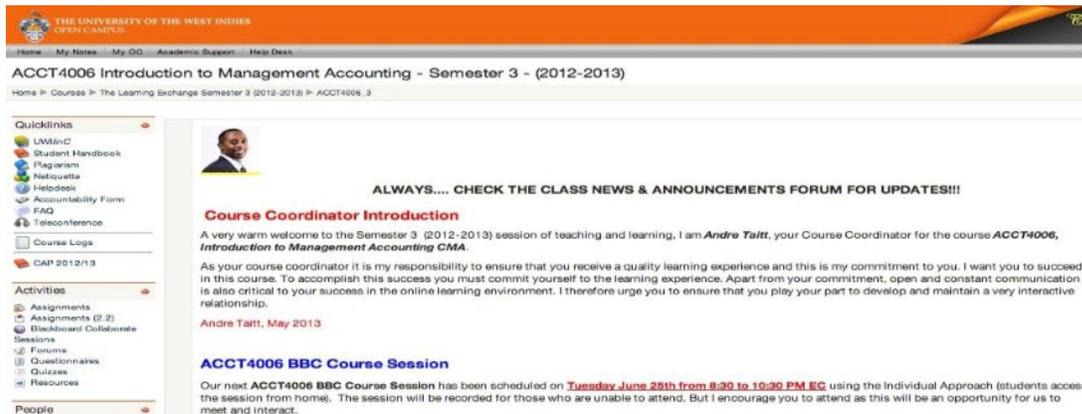


Figure 5 – Coursepage on the Learning Exchange

- **Web Services** – A complete Google Apps for education solution leveraging SSO for students is used to provide web service. Common tool and features include: e-Mail, Calendar, Drive, Docs, Sheets, Slides, Sites, Vault and much more. The OC uses the web services in a unique way for document management and sharing and “my notes” (for online note taking) See more on Google solution at <http://www.google.com/enterprise/apps/education/products.html>

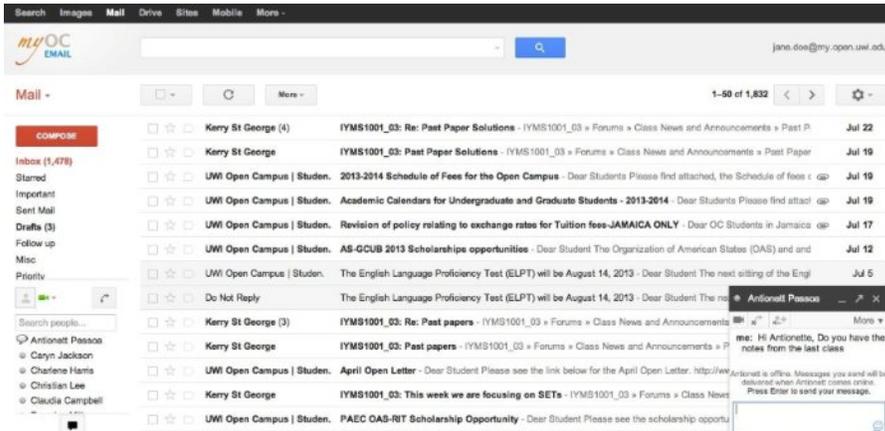


Figure 6 – Web Services | Student e-Mail

- **Academic e-Portfolio** – This is a fully integrated social e-portfolio system using mahara as shown in figure 7. Mahara is a fully featured web application to build an electronic portfolio. Users create journals, upload files, embed social media resources from the web and collaborate with other users in groups, taken from the Mahara website (<http://mahara.org>).

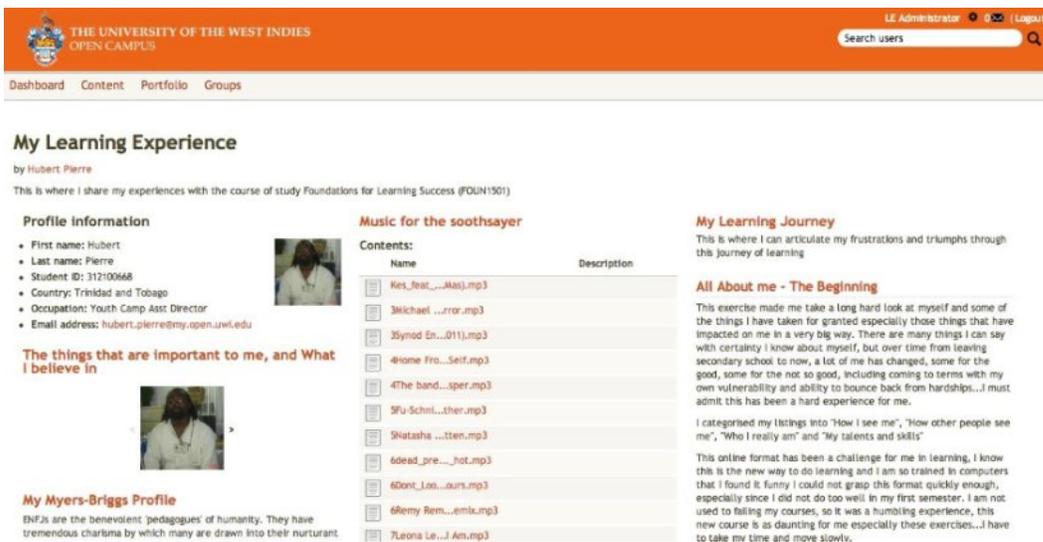


Figure 7 – UWI Open Campus Academic e-Portfolio

2. Enterprise Solutions

- **Synchronous Teaching Tool using Blackboard Collaborate (BBC)** – This is web conferencing software, combining the capabilities of industry leaders Wimba and Elluminate, Blackboard Collaborate provides a comprehensive online learning and collaboration platform designed specifically for education. Taken from <http://www.blackboard.com/Platforms/Collaborate/Overview.aspx>. The Programme Delivery Department also uses BBC for online training and orientation. Through a supplied vendor plug-in BBC is integrated with the Learning Exchange
- **Online Library Systems (UWILinC)** - UWILinC is the e-information portal for The UWI Libraries allowing search and discovery from a single interface. UWI information resources from across the English-speaking Caribbean in all formats including UWI's intellectual output, subscribed resources (electronic journals, databases, electronic books) and the catalogues for all four UWI campuses can be accessed via UWILinC. Taken from <http://library.open.uwi.edu>.
- **Plagiarism Detection Software Turn-it-In** - Turnitin is an Internet-based plagiarism-prevention service taken from http://en.wikipedia.org/wiki/Turn_it_in. Through a supplied vendor plug-in turn-it-in is integrated with the Learning Exchange.
- **Open Campus Helpdesk** – Web-helpdesk is Web-based IT Help Desk and Asset Management solution, which streamlines the help desk ticket process from request to resolution, taken from <http://www.solarwinds.com/solutions/it-help-desk.aspx>

SUPPORT SERVICES (IN SERVICE MODEL)

Using the above-mentioned Open Campus systems as supporting tools the following support services are implemented:

- User Training
- Academic Support
- Course Delivery Support
- Technical Support
- Student Assistants
- Training Courses
- Online Training Manual
- Live Orientation and Demonstration
- Online Workshops/ Webinars
- OC Helpdesk

User Training

All sections of PDD support this initiative by providing different aspects of training.

- IDC Section – Provides pedagogical training to the facilitators. They deliver a best practice in teaching training, through the Managing and Facilitating Online Instruction course (MFOI), which delivers several offerings per year to both staff and potential. Facilitators are not offered teaching contracts unless they past the intense course.
- PM - Provides over-all advice and guidance to course coordinators (lecturers), all through the year.

- CD – Conducts a three-phases online orientation for new students at the beginning of every semester.
- LS – Conducts online and face-to-face system training with all new and returning facilitators at the beginning of every semester. They host webinars and workshops during the semester on all various topics related to the online systems. The Learning Support team also provide training and guidance to the technical staff located at the remote country sites, so that all technical training delivered to student remotely is standardized.

Academic Support

All sections of PDD support this initiative, but the IDC, PM and CD teams are directly involved.

- IDC Section – Provides over-all advice and guidance to Programme Manager (PM) and course coordinators (CC)
- PM - Provides over-all advice and guidance to course coordinators (lecturers), all through the year.
- CD – Manage queries, related to academic matters. They are the main interface with students.
- CC – The course coordinator being the content expert is involved in the support, related to their individual courses. They have the final decision on retakes, resubmissions etc.
- e-Tutor - The e-tutor is the content expert and is involved in the support, related to their individual course group.

Course Delivery Support

The Course Delivery Assistant (CDA) is responsible for supporting the internal quality control process; they monitor the interactions on the LE to ensure students receive the support promised by the Open Campus, Student Charter.

Their main functions during the semester include:

- 1) Monitoring of online activity.
- 2) Monitoring response time, by both CC and e-tutor
- 3) Feedback on students queries posted in forums
- 4) Feedback on student assignment queries

They Investigate student queries:

- 1) Problems with quizzes
- 2) Problems with uploading assignments
- 3) Problems with material
- 4) And any other course related queries

Technical Support System (Learning Support)

The Learning Support (LS) Section heads the Open Campus course related technical support. The Learning Support Supervisor is the central administrator for the Learning Exchange (Figure 5), and ensures all courses are built and configured for delivery each semester with the support of the Learning Support Specialist (LSS). The LSS assists in the quality control process that ensures all course materials are created and deployed on the online course pages.

This team also seeks new ways through technology to enhance the academic support and Programme delivery processes. They provide technical support and training during the semester and respond to all technical queries related to the Learning environment.

Student Assistants

The Learning Support team manages a group of Student Assistants. They are current UWI undergraduate and graduate students who are provided with training and the opportunity for part-time employment as they pursue their undergraduate and graduate degrees. They are currently responsible for technical support during synchronous teaching sessions.

Training Courses

The Learning Support team creates and manages all self-paced training courses on the Learning Exchange. These courses are rich media courses that orient users on the use of the different Open Campus systems. They include, but not limited to, offerings such as: “Introduction to e-Portfolio”, “Introduction to Blackboard Collaborate”, “Introduction to Turn-it-In” and the most accessed, “Introduction to the Learning Exchange”. These courses are free self-enroll courses.

These courses are constantly being revised and improved as suggestions and feedback is forwarded, using the built in feedback system hosted by survey monkey see more at <http://surveymonkey.net>.

Online Training Manual

The Learning Support team created and manages a self-paced step-by-step online training manual on the Learning Exchange as seen in figure 8. This manual was build for teaching staff and it shows how to perform course related administrative task, such as grading, updating the course page and communicating with users.

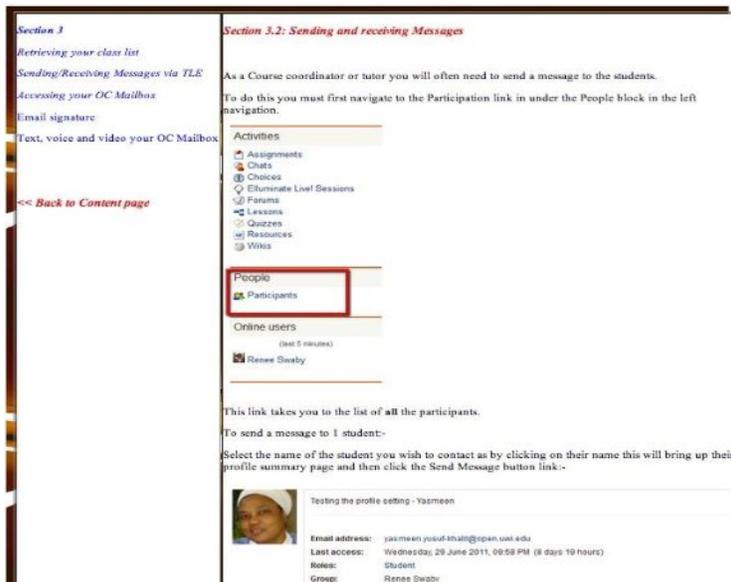


Figure 8 – Online Training Manual

Live Orientation and Demonstration

All sections of PDD support this initiative by providing different types of live orientation and demonstration, during the academic year, using the blackboard collaborate tool.

- IDC Section – Provides pedagogical training to the facilitators. They deliver a best practice in teaching training through the Managing and Facilitating Online Instruction course (MFOI), which runs several offerings per year. They also demonstrate the best practice in the use of BBC for teaching.
- PMs - Provides over-all advice and guidance to course coordinators (lecturers), all through the year.
- CD – Conducts three phases of online orientation to new students at the beginning of every semester.
- LS – Conducts online and face-to-face system training with all new and returning facilitators at the beginning of every semester. They host webinars and workshops during the semester on all various topics related to the online systems.

Online Workshops/ Webinars

Workshops are held during the semester, and these focus on key topics, such as "Configuring and Managing your Online Grade-book" or "Using e-portfolio in an Academic Environment".

Workshops are key to the OC support system, as they address key features of the online systems and help the teaching staff understand these systems, who then in-turn become support experts to the students in their respective courses.

Open Campus Helpdesk

The helpdesk is apart of the Computer and Technology Services (CATS) Department. The goal of the Helpdesk is to provide 24/7 customer support to all users, as they receive queries and other problems directed to the Open Campus on matters related to Programme delivery. These queries can be submitted using an e-mail address (helpdesk@open.uwi.edu) or by direct access to the helpdesk dashboard (<http://help.open.uwi.edu>).

As queries are received they are sent to the Open Campus ticketing system and routed accordingly. The Learning Support and Course Delivery teams receive course delivery queries as these are routed based on type (technical or academic)

The Help Desk section comprises a mix of experienced staff, and UWI undergraduate and graduate students who are provided with training, and the opportunity for part-time employment as they pursue their undergraduate and graduate degrees.

FINDINGS

Building a tightly integrated system can lead to efficiency and cost savings, but when this system is coupled with a strong organizational structure and clear team direction, a sustainable online delivery ecosystem is formed. Student and facilitators of the UWI Open Campus now enjoy an online delivery system that continue to improve and evolve to meet the demands of an ever-changing global economy.

Future Developments

The Programme Delivery Department is looking into branding the in-service model with an identifiable logo and theme. They are also working on mission, vision and core values statements for the Unit. The mission and vision statements, along with the core values will be in sync with the current Open Campus Mission and Vision, as seen below.

UWI Vision Statement

By 2017, the University will be globally recognized as a regionally integrated, innovative, internationally competitive university, deeply rooted in all aspects of Caribbean development and committed to serving the diverse people of the region and beyond.

UWI Mission Statement

To advance education and create knowledge through excellence in teaching, research, innovation, public service, intellectual leadership and outreach in order to support the inclusive (social, economic, political, cultural, environmental) development of the Caribbean region and beyond.

- Core Values
- Integrity
- Intellectual Freedom
- Excellence
- Civic Responsibility
- Accessibility
- Diversity and Equity

CONCLUSION

As a final reflection, evolution takes place when the need to adapt and survive is great. The UWI Open Campus delivery unit leveraged the current technology and resources, to help the university serve the underserved, and accommodate those persons in the region who cannot attend a physical campus.

The university now provides an online environment for independent learning that will continue to grow, because of innovation and technology. The University of the West Indies, Open Campus is adapting.

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