

E-Learning in Official Statistics at USP



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Background

- USP = one of two regional universities in the world.
- In existence since 1968.
- Member countries
 - Cook Islands, **Fiji**, Kiribati, Marshall Islands, Nauru, Niue, Samoa, Solomon Islands, Tokelau, Tonga, Tuvalu, Vanuatu.
- Fiji hosts the main campus at Suva, along with two smaller campuses at Lautoka and Labasa.
 - 11,000 out of 21,000 students, 1,500 out of 1,800 staff
 - Vanuatu and Samoa host one programme each: Law and Agriculture.
 - Other campuses rely on courses offered by staff based elsewhere.
- Distance/Flexible Learning (FL) a key part of teaching and learning.

Teaching at USP

- Face to face (F2F) teaching is mainly available at Suva campus.
 - Exception: The Law School and most of its teaching staff are based in Port Vila, Vanuatu so LLB is offered F2F there.
- Regional campuses rely mainly on FL or summer schools.
- Modes of FL:
 - Print: main learning resources available in hard copy
 - Online: main learning resources available online
 - Blended: distance + some F2F contact.
 - USPNet: a satellite network for data transfer and A/V communication links USP campuses for distance delivery.
- Predominant FL mode at USP is the Print mode.
 - 22% of programmes available as Print  60% by 2018
 - One major programme available online (LLB)  30% by 2018.
 - One generic compulsory course (UU100 – Computer Literacy) is online.

Electronic Resources in Teaching

MOODLE=Modular Object-Oriented Dynamic Learning Environment.

A platform for posting online materials, communicating with students and hosting discussion forums.

REACT= Remote Education and Communication Technology.

A studio-conference room with full video conference facilities for the purpose of holding satellite tutorials.

MOODLE

- Moodle is an online file-sharing platform, widely used in higher education. It authorises participants as teacher, teaching assistant, student, each with a different level of authorisation to add content.
- 96% of USP courses use Moodle, regardless of mode of delivery.
- Some uses of Moodle
 - **Introductory:** course description, lecture and tutorial schedule, course outline, reading list, contact details and office hours.
 - **Weekly:** lecture notes, statistical data, web-links to supplementary readings, weekly exercises.
 - **Irregular:** Course announcements, chat rooms, discussion fora.
 - **Assessment:**
 - Set topic + deadline for essays and receive submissions
 - Check for plagiarism with Turnitin, a nested software.
 - Release marks on an individual or anonymised basis.
 - Conduct time-limited, supervised tests online

BCom in Official Statistics

Offered by the School of Economics since 2006. Driven by the need for trained statisticians in NSOs and other parts of the civil service. Partial structure:

COURSE CODE	TITLE	MODE OF DELIVERY
YEAR 1		
OS 101	Official Statistics and National Statistical Systems I	F2F and Print
OS102	National Accounts and Allied Statistics I	F2F and Print
EC101	Principles of Macroeconomics	F2F and Print
PD101	Introduction to Population Studies	F2F and Print
YEAR 2		
OS201	Official Statistics and National Statistical Systems II	F2F and Print
OS202	National Accounts and Allied Statistics II	F2F and Print
EC203	Statistics for Economics	F2F and Print
PD200	Introduction to Analytical Demography	F2F and Print
YEAR 3		
OS301	Introduction to Census Survey Data Analysis	F2F
OS302	Analytical Models and Data Accounting Frameworks	F2F
PD303	Applied Demography	F2F
EC302/304	Microeconomics/Development Economics	F2F and Print
EC301/303/306	Macroeconomics/Econometrics/ Int'l Economics	F2F and Print (ex. EC303)

PRINT MODE PROVISION IN OS COURSES

- Each course coordinator provides:
 - Course Handbook
 - Assignments Book: weekly exercises, coursework assignments and deadline, schedule of topics and tests.
 - Data CDs (optional)
 - Provided by campus bookstore at no extra cost.
- Assessments taken or submitted as in F2F mode.
- 3-5 face-to-face tutorials per semester with course coordinator.
- Conducted in REACT studios: simultaneous audio-visual link, screen-sharing and document camera projection. Coordinator can communicate verbally, via handwritten notes or via screen sharing.

A COMPARISON OF PASS RATES IN OS COURSES*

COURSE	F2F MODE		FL MODE	
	Enrollment	Pass Rate (%)	Enrollment	Pass Rate (%)
EC101	45.5	76.0	30.8	57.6
EC203	43.9	78.0	24.7	71.4
EC301	25.7	78.8	19.8	71.4
EC302	25.4	87.5	16.3	80.3
OS101	3.0	88.1	3.8	70.0
OS102	1.7	83.3	2.5	84.2
OS201	2.4	94.7	N/A	N/A
OS202	3.0	100.0	0.3	100.0
OS301	1.9	94.6	N/A	N/A
OS302	1.3	98.0	N/A	N/A
PD101	5.7	71.2	4.4	70.1
PD200	3.7	83.6	1.3	35.8
PD303	3.6	73.9	N/A	N/A

Lower pass rates in FL courses could be a matter of selection bias.

* AVERAGE OVER 4 YEARS: 2009-20012.

REDESIGN OF OS DEGREE

- OS programme is currently being re-designed with two main objectives:
 - To better meet the capacity needs of the region in both theory and practical content.
 - To be more flexible in both structure and mode of delivery.
- Redesign is being led by Dennis Trewin, former Australian Chief Statistician amid consultation with NSO Leaders, SIAP, ABS, NZStats, IMF/PFTAC.
- Two key implications for e-learning and online delivery:
 - Supply side: Use of external providers (SIAP, ABS, NZStats/Victoria University for PG delivery).
 - Demand side: Modularisation and flexibility of access for NSO staff.
- Online delivery will be crucial.

CHALLENGES OF ONLINE LEARNING: THE USP EXPERIENCE

- Significant hardware and connectivity issues within and between campuses.
 - Upgrades to fiber-optic cable and O3B are planned over the next 5 years.
- Lack of F2F contact with main teaching staff and recruitment difficulties in regional campuses.
- Conversion of F2F material for online delivery.
 - Online material offers great potential but needs to be matched with IT skills.
- Trade-offs between logistics and integrity of assessment.
 - Existing online assessments are perceived to be not that well suited to quantitative subjects.

CONCLUSIONS

- Distance learning is a key component of USP's educational strategy.
- Current distance learning strategies are heavily reliant on hard copy formats and postal communications.
- The plan is to significantly increase e-learning resources over the next five years.
- Some of the issues affecting e-learning are likely to be resolved within this period, but the one of assessment has yet to be properly addressed.