DIGITALISATION STRATEGY WORKSHOP REPORT & NEXT STEPS

EMBURY INSTITUTE OF HIGHER EDUCATION

DURBAN, SOUTH AFRICA
MAY 8 – 12, 2017

Dr. Stephen Murgatroyd, Chief Innovation Officer
Maxim Jean-Louis, President – Chief Executive Officer
Contact North I Contact Nord
www@contactnorth.ca

THE CONTEXT

Contact North | Contact Nord

Contact North| Contact Nord, as part of its mandate, is committed to sharing its expertise within Canada and around the world so as to increase access to and success in learning for all. This commitment to equity through access to learning is deep-seated in the work it undertakes, and provides the rationale for its teachonline.ca portal, its partnerships with a range of international organizations, its agreement to host the [27TH World Conference on Online Learning in Toronto](#) from October 16 to 19, 2017, and its growing connection to innovative projects around the world.

This work benefits Ontario by ensuring that Ontario's 24 publicly-assisted colleges and 22 publicly-assisted universities can be engaged in this work and their own innovations in learning showcased. It also helps build the reputation of Ontario as Canada's leader in online learning and learning innovation.

Embury Institute of Higher Education (EIHE), Durban, South Africa

EIHE is a leading provider of teacher education in South Africa. Using a unique model of immersive learning, students spend one week in the Institute and one week in school and then repeat this process for the full duration of their studies. It is now seeking to leverage technology to support both its current students and its planned growth. A digitisation task team, linked to a major expansion of EIHE in 2017-18, seeks to position EIHE as the fastest growing institution of its kind in South Africa and the most innovative.

THE CHALLENGE

Contact North | Contact Nord was asked by Dr. Divya Singh, Chief Compliance Officer, to help EIHE think through the strategic deployment of technology so as to support growth and innovation. In particular, EIHE wished to better understand:

- How digital technology could support improved learning outcomes and completion for Embury students.
- How digital technology could support higher levels of student engagement.
- How digital technology could provide support for student services, including library services, education and career services and related activities.
- How Embury could learn from best practices and the experience of Ontario so as to "leapfrog" past competitors and other higher education institutions.
- How digital technology could help increase the effectiveness and efficiency in the deployment of resources within EIHE.

Digital technologies, for EIHE, include not just learning management systems (e.g. Blackboard, Desire2Learn, Moodle) but also learning analytics, student information systems, blockchain technologies and tools for collaboration. Also included in the mix are social media tools.

EIHE has a task team, headed by Dr. Amanda Lee and supported by Dr. Patrick Bean on digitalization of the curriculum. The task team represents a cross-section of stakeholders in EIHE and will report to the EIHE Holdings Company on progress in late June 2017. A number of individuals from EIHE were invited to attend the three-day Workshop, to explore the issues and opportunities (Appendix One) suggested by digitalization.

Contact North | Contact Nord's team comprised Maxim Jean-Louis (President – Chief Executive Officer) and Dr. Stephen Murgatroyd (Chief Innovation Officer), both of whom have access to a considerable network of researchers, practitioners and technology providers around the world.

THE PROCESS

The work began by exploring what technology can do and what others are doing with technology to impact learning and learning outcomes. Eiffel, a South African based company, demonstrated the capabilities of Blackboard and focused in particular on: (a) adaptive learning capabilities using the adaptive learning engine embedded within Blackboard; (b) predictive analytics capabilities of Blackboard; and (c) the ability of Eiffel to offer professional development and training to EIHE staff so as to fully leverage the capabilities of Blackboard. EIHE currently makes modest use of Moodle. A full catalogue of Moodle's 2017 capabilities is available here. Eiffel's primary value proposition is that it can provide local support for a world-class product through a one-stop "shop" for all of Embury's needs. It is an established as a provider within higher education in South Africa.

Contact North | Contact Nord's team then presented some ways in which technology was being used to support teaching, learning and student services. In particular:

- New developments in assessments for learning and assessment of learning using AI (Varafy) and video-based assessment (Valid8).
- New uses of adaptive learning engines to personalize learning.
- Growth of peer-to-peer and collaborative learning.
- A strong focus on learning design for student engagement based on authentic tasks.
- The flipped classroom and the ways in which blended learning was growing in use to become normative.
- The growing use of open education resources (OER) and free-to-use textbooks – suggesting that content-based teaching is not a source of competitive advantage.

- The emergence of nano-credentials and modular, stackable learning (e.g. The Kentucky College System).

- Video glasses and video-based review and assessment (e.g. Canberra Institute of Technology Engineering program).

- Mobile learning and anywhere / anytime learning.

- Work-based learning and accreditation – and the systematic use of immersive experiences.

- Virtual reality, simulations and games.

The Contact North I Contact Nord team made the key point that the first step for EIHE is to determine the extent to which their model of teaching and learning for current and new programs needed to increase student engagement, improve learning outcomes and leverage real-world design. The team introduced the SAMR model (see below) as a framework for decision making about digital technologies and their place in any strategy.
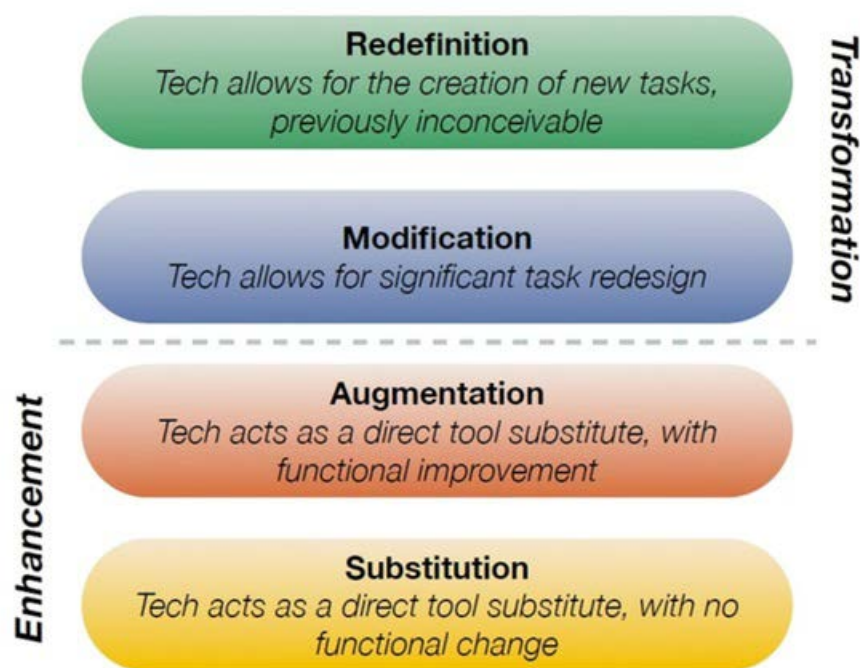

It was suggested that real competitive advantage arose not from augmentation but from modification and redefinition. More of the same with some components online could be achieved in a low cost way using a simple WordPress website, but would not achieve the strategic intentions of the Institute. These strategic intentions require an integrated learning system, a redesign of learning and a fulsome approach to both flexible routes to success and full support for immersive learning.

The Contact North I Contact Nord team also presented a set of ideas intended to suggest ways in which student engagement could be improved with the support of technology. This presentation, which was also shared with Ontario school-based colleagues as part of the annual Symposium for Technology-Enabled Teaching and Learning in Northwestern

Ontario (SeINO) conference (via Google Hangout link). These key points were stressed:

- Design is the key to engaged learning – engagement does not happen by chance.

- Design which leverages the functionality of technology can make a significant difference – e.g. the use of adaptive learning.

- Authentic learning tasks and learning which has impact on an issue which students care about or have raised as concerns to them can help. Solving real world problems works.

- Collaborative learning – with global partners, learning through projects with communities, learning as a peer network – increases engagement.

- When students own and co-create their learning, they are engaged.

A conceptual framework for learning design was introduced, based on the work of Garrison, Anderson and Archer[1]. Their conceptual model is reproduced here:
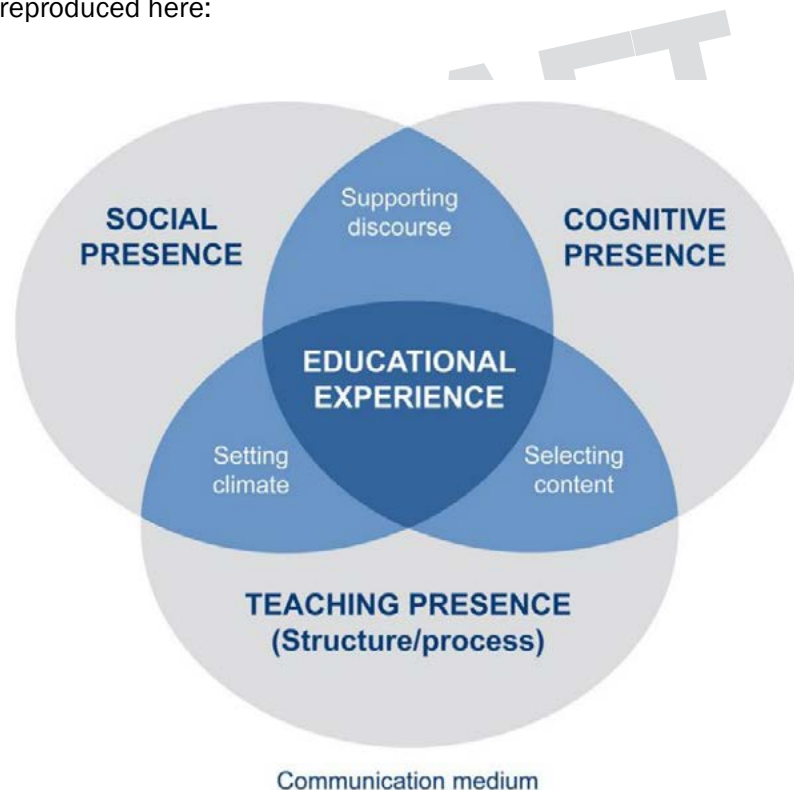
The emphasis for design is not on content but on experience and presence – this is true whether the work is face-to-face teaching, blended learning or fully online. All design teams working on a program need to use the design framework as a basis for their learning design.

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1 Garrison, D. R., Anderson, T., & Archer, W. (2000). Critical inquiry in a text-based environment: Computer conferencing in higher education. The Internet and Higher Education, 2(2-3), 87-105 PDF
Garrison, D. R., Anderson, T., & Archer, W. (2001). Critical Thinking and Computer Conferencing: A Model and Tool to Assess Cognitive Presence. American Journal of Distance Education. PDF

A STRATEGIC FOCUS

In the next phase of the work with EIHE teams, were asked to identify the key components of their teaching and learning strategy going forward, not just for their work in teacher education but for all programs. The discussion was robust, challenging and yet produced a great deal of alignment.

This alignment revolved around these key ideas:

- Student orientated learning – ensure that the focus is on the student experience and learning process/outcome, not just content.

    o This speaks to the role of the academic as coach, mentor, guide not just content expert (Coaches vs Professors).

    o "It's all about relationships" - relationship learning with focus on facilitation and engagement.

- Work integrated learning – designed as part of the immersive experience.

    o Focus on stakeholder relationships, partnerships and work-based and peer-to-peer support for immersion.

    o Design and develop work-based learning assessments (possibly using video).

- Contextually driven program designs – using the model presented above.

- Students should have a choice of which mode they wish their learning module to be – classroom, online, blended. Quality has to be assured in all modes but the competitive advantage key is flexibility in choice.

- Journey-based learning – Focus on the entire granular experience and not just learning outcomes. This means we need to start measuring and focusing on student engagement from the very beginning of their contact with Embury and focus on measuring teaching quality, the student service experience, student engagement and all the granular features of student success.

- Staff learning informed by best practice from around the world. Embury must demonstrate adopt/adapt capability in taking innovations that work elsewhere and making them work in a South African context.

For Embury to differentiate itself, it will do so through immersive learning, flexibility and quality with choice of mode of study for each module, strong sense of presence and relationship in all modes of learning and an emphasis on student engagement.

A summary of the thinking from this session is provided here:

1. Our reputation will be based on:

    • **Immersive learning** – students will engage directly in the workplace so as to deepen their authentic learning.

- **Engaged learning** – our teaching strategy will seek to ensure that students are highly engaged and passionate about their learning.
- **Flexible learning** – students will have choices about how they learn (in class, online, blended).
- **Collaborative learning** – students will engage in project-based, real-world learning.
- **Quality learning** – Embury programs and courses will have the highest quality standards.

2. Students will have flexible routes to success. Each module will be available:

   - In class as part of the immersive experience, where blended learning is the norm.

   - Fully online – students can complete the module fully online in a rich, engaging learning experience using design principles which build on adaptive learning technologies.

   - As an intensive flipped classroom experience – short course with an intense online learning component supported by a short period of intense classroom work.

3. As they progress through their program, students can move between modes of study – some modules completed entirely online, some in flipped classrooms and some fully face-to-face. All courses will be high quality, highly engaged and collaborative.

4. We will invest in the professional development of our teaching staff aimed at strengthening their design capabilities, their understanding and ability to fully use the LMS and to practice engaged, authentic learning.

5. We will support our students in the development of skills in peer-to-peer coaching and assessment, collaborative learning and learning online.

To enable this work, Embury will invest in an effective LMS, adaptive learning systems, make use of predictive analytics and develop modules on a team basis.

SiRS

The teams then explored what they needed to:

- **Stop** doing

- Significantly **improve**

- Completely **redesign**

- **Start** doing – work not done before

A substantial catalogue of opportunities were identified, most of which emphasized the need for Embury to stop thinking and working in silos, increase the value of technology to support both administration and

learning, better leverage the process knowledge and skills of faculty and rely less on knowledge and content transfer. Though some time was spent on issues of balancing the need for profit with the focus on learning, the biggest thrust of these comments was to be bold, courageous and show leadership in South Africa for a flexible approach to immersive learning based on a high level of engagement and participation.

A brief summary of the SiRS developed include:

STOP:

- Using profit to drive teaching and learning and see teaching and learning as the basis for revenue and profitability.
- "Fuzzy thinking" and develop clear, focused and specific ways of engaging in conversations about technology, teaching and learning – focus.
- Working and thinking in silos.
- Seeing face-to-face as some kind of gold standard and see student engagement, learning outcomes and learning relationships as the core business of EIHE.
- Using workload and time as a basis for decision making.
- Ignoring staff and their views and engage them in the change management process.
- Being hesitant.

IMPROVE:

- The use of evidence and the frequent collection of evidence about student learning, satisfaction and engagement (pulse points) and the establishment of targets and measures which set direction.
- Communication to staff about where Embury is, is going and the journey.
- Student engagement in the change process around teaching and learning.
- The creative, adaptable and resilience of students.
- The design capabilities of staff for engaged learning in classrooms, in workshops and online

REDESIGN:

- Vision, mission and values of EIHE to align with strategy.
- Measures of short, medium and long-term success and the collection of needed evidence.
- Job description and workload management.
- Our focus on learning as process and de-emphasize transferring content – develop authentic, collaborative and engaged learning.
- The use of predictive analytics and statistics as a basis for student services and preventive intervention.

- Our approach to students in arrears – find new ways of providing support to successful students in financial difficulties.
- Assessment for learning and assessment of learning.
- Business processes around lean processes, leveraging online tools (e.g. human resources, finance, student registration).

START:

- Balanced scorecard – measures of EIHE overall performance, program performance and human resources.
- Empowerment of those nearest to the student around a framework of clear strategy which the organized is focused and aligned around.
- Agreeing on a common toolkit for the work of teaching and learning.

STRATEGIC RULES

Using a framework of strategic rules[2] focusing just on teaching and learning, three teams worked to develop:

- **"How to" Rules** – How Embury will differentiate itself from competitors.
- **Boundary Rules** – How Embury will determine the boundaries within the teaching and learning agenda for its students.
- **Priority Rules** – What Embury will give priority to.
- **Timing Rules** – When Embury will do what with what order of priority.
- **Exit Rules** – When Embury will exit from certain practices in teaching and learning.
- **Transition Rules** – How Embury will manage change in a collaborative way with key stakeholder groups (Faculty, service staff, students, government).

While the three teams presented subtle differences, three key observations from this initial work (clearly much more to do) are:

- The need to ensure that there are as few boundaries between different modes of study in each module ("connectivity").
- The priority for all modules has to be high quality learning experiences, high levels of student engagement and flexibility.
- The "how tos" focused primarily on the quality of relationships between students and students, immersive learning and the quality of relationships with faculty.

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2 Eisenhardt, K.M. and Sull, D. (2001) Strategy as Simple Rules. Harvard Business Review, Jan 79(1): pages 106-16.

LEVERAGING TECHNOLOGY

Though the task team was charged with digitalisation, it was generally understood that technology was a means to an end not an end in itself. The aim is to rethink teaching and learning in a digital age so as to position Embury as having distinctive and differentiated services and supports for students.

The workshop did not select specific technologies, but made these observations:

1. Technologies chosen for the toolkit EIHE needs have to be seamlessly connected – the Student Information System needs to connect to the Learning Management and Assessment Systems, the Student Support Systems (library, student services) and the interactive classroom.

2. Technology needs not to get in the way of learning and teaching – reliable, robust and fully supported.

3. The technology chosen should enable, not inhibit the design of immersive learning. It should support:

    a. Peer-to-peer collaboration, interaction and assessment

    b. Project-based work and authentic learning

    c. Rich interaction between faculty and students

    d. Various modes of assessment, including video-based assessment, online assessment, skills and capability assessment

    e. Enable learning on mobile devices (tablets, Smartphones)

    f. fQuality assured learning

    g. Identity and data protection – ethical data and privacy

    h. Cybersecurity

While Blackboard is impressive, EIHE is not yet fully leveraging the full power and capabilities of Moodle 3.2 (2016) and there are real costs (time, people) in transferring from one platform to another. The full functionality of Moodle is documented here. Before making a "buy" decisions, EIHE needs to do much more to define its needs and approach to learning and teaching and assess where students are and where they could get them to in the near and medium-term future.

Embury also needs to be dynamic and innovative and encourage, within a clear set of design rules and approaches to learning shared by all faculty across all programs, experimentation and adoption of new approaches.

The issue is not "which LMS should we purchase and support" it is "what does teaching and learning in a digital age look like for Embury in 2025 and how can we think though what technologies we need to get us there". The digitalisation task team is actually a teaching and learning task team.

NEXT STEPS

EIHE intends to move quickly to consolidate its learning from this work and to develop a strategically focused approach to immersive and flexible learning by the end of June, which it can share with faculty. A challenge dialogue (see here for a description) is suggested, which would provide a focused way for holding an inspired conversation with all staff and a cross section of students, who now need to be engaged.

EIHE also needs to start to collect some baseline data on student engagement (a tool for doing this is available here), using a quick survey tool on a Mobile app with pencil and paper versions so as to sample student engagement by program and year of study. A systematic effort to collect, consolidate and present data required for decision making is needed.

The task team needs to identify more explicitly its teaching and learning strategy, taking the lead from the overarching Academic Framework being developed for the group at a workshop in July, and identify what kind of digital functionality it needs to enable this work. For example, if there are to be significant changes in assessment or in how classroom-based work is monitored and evaluated, then what technological tools would enable this work and where can they be found?

The task team also needs to identify what analytic data it needs to begin to practice both adaptive learning and predictive analytics – features available within Moodle and Blackboard but also available through other systems.

When developing a teaching and learning value proposition, it needs to strongly engage students and faculty in this work and see this work as about "all of our futures", not just a business and operational challenges.

The task team also needs to identify the needed resources (people, time, money, technology) and develop a clear link between these investments and the returns which Embury can expect to see. Any Embury wide conversation about the future should be based on a clear resource commitment.

THE FUTURE

Contact North | Contact Nord facilitated this work so as to enable a sister organization in another country to provide access to teaching and learning for South Africa's future teachers and entrepreneurs and business leaders. We are hoping that this four intensive process with 20 academic, technical and administrative staff will help accelerate this conversation and these developments at EIHE in student engagement, student choice of learning modality, implementation of digital tools to facilitate positive learning experience and outcomes.

SM/MJL/ May 19, 2017

APPENDIX ONE: LIST OF PARTICIPANTS (EMBURY INSTITUTE FOR HIGHER EDUCATION STAFF)

Title	Department
Prof. Divya Singh	Chief Academic and Compliance Officer Stadio Holdings
Mr. Andrew Horsfall	Chief Operations Officer Stadio Holdings
Mr. Theuns Laubscher	Chief Business Development Officer Stadio Holdings
Prof Patrick Bean	Managing Director Designate Embury
Dr Amanda Lee	Dean: Research, Innovation and Collaboration
Mr. Barry Swain	Chief Campus Management Officer Embury
Ms. Linda Chettiar	Head: CPTD and ICT
Ms. Kershnee Nair	HOD: Examinations and Regulatory Compliance
Dr Berendien Van Aswegen	Head: Campus Academics
Ms. Leanne Browning	Head: Curriculum and Programme Development
Dr Colleen Thatcher	Dean: Faculty of Education
Mr. Rowan Thompson	HOD: Maths Science and Technology
Ms. Fiona Oldacre	HOD: ECD and Foundation Phase Programme Coordinator: Diploma in Grade R Teaching
Ms. Veronica Wright	HOD: Education
Mr. Bradley Cooper	HOD: Teaching Practice
Ms. Michelle Shepherdson	HOD: Languages Programme Coordinator: Post Graduate Certificate in Senior Phase and Further Education Training Teaching
Ms. Carolyn Trim	HOD: Social Sciences Programme Coordinator: Bachelor of Education in Intermediate Phase Teaching
Ms. Caryn Naude	Lecturer Programme Coordinator: Bachelor of Education in Foundation Phase Teaching
Mr. Michael Mthethwa	Lecturer Programme Coordinator: Advanced Diploma in Physical Education and School Sports
Mr. Warwick Von Hagen	Lecturer/Academic IT Training/Support
Mrs. Kolean Padayachi	Lecturer/Academic IT Training/Support
Mr. Alistair Nel	Contractor – LMS Design and Support

LIST OF PARTICIPANTS FROM CONTACT NORTH | CONTACT NORD

Maxim Jean-Louis	President – Chief Executive Officer
Dr. Stephen Murgatroyd	Chief Innovation Officer

EMBURY
INSTITUTE FOR HIGHER EDUCATION

DIGITALISATION STRATEGY WORKSHOP

Monday 8 May

19h00 Dinner

Mamma Luciana's (Florida Road) Divya, Pat, Stephen, Maxim and Mandy

Tuesday 9 May

9h00   Blackboard Collaborate Presentation

Theuns Laubscher to welcome and introduce Blackboard representatives

Participants: Divya Singh, Patrick Bean, Stephen Murgatroyd, Maxim Jean-Louis, Mandy Lee, Theuns Laubscher, Andrew Horsfall and Linda Chettiar

13h00 Lunch

14h00 Unpacking digitalisation-related terminologies
(Cooperative learning workshop style)

Welcome – Pat

Introduction of Maxim and Stephen - Divya

Focus: Identify terminologies: 21st century teaching and learning; Online learning, blended learning, synchronous vs asynchronous, flipped learning, ICT linked inquiry mediated learning, etc.

Participants: Divya Singh, Patrick Bean, Stephen Murgatroyd, Maxim Jean-Louis, Mandy Lee, Theuns Laubscher, Andrew Horsfall, Linda Chettiar and digitalisation task team (12 members)

16h00 Blended Learning and 21st century teaching and learning: the impact of digitalisation (Key theoretical underpinnings) (Stephen Murgatroyd and Maxim Jean-Louis)

16h30 Close of day

Wednesday and Thursday workshop format: 30 – 40 minute presentation by Stephen Murgatroyd and Maxim Jean-Louis followed by 90 minutes workshop with digitalisation task team (12 members)

Wednesday 10 May

09h00 Digitalised Blended Learning approaches and best-practices (Stephen Murgatroyd and Maxim Jean-Louis)

Participants: Divya Singh, Patrick Bean, Mandy Lee and digitalisation task team

12h00 Lunch

13h00 Learning Management Systems; the impact of the digitalisation on Teaching and Learning (Stephen Murgatroyd and Maxim Jean-Louis)

Participants: Divya Singh, Patrick Bean, Mandy Lee and digitalisation task team

15h00 Tea

15h30 Instruments/devices for first and third world contexts (Stephen Murgatroyd and Maxim Jean-Louis)

Participants: Divya Singh, Patrick Bean, Mandy Lee and digitalisation task team

17h00 Close of day

Thursday 11 May

9h00   Factors that may affect successful digitalised blended learning (Stephen Murgatroyd and Maxim Jean-Louis)

Participants: Divya Singh, Patrick Bean, Mandy Lee and digitalisation task team

12h00 Lunch

13h00 Student and staff development/support in a digitalisation strategy (Stephen Murgatroyd and Maxim Jean-Louis)

Participants: Divya Singh, Patrick Bean, Mandy Lee, digitalisation task team and 2 - 3 senior students

15h30 Close of day

Friday 12 May

9h00 Embury staff interaction/discussion with Stephen and Maxim

10h00 Conference Planning workshop: *Digitalisation of Teaching and Learning: challenges and best practices*

Target audience: 1) Teacher Education academics; 2) School leaders and 3) Blended Learning champions across disciplines

Conference target date: November 2017

Participants: Divya, Patrick, Mandy, Stephen and Maxim

Starfleaf: Dr Maria Madiope

12h00 Lunch