Student Personalised Academic Road to Success (SPARS)

Creating interconnections between student support, academic learning and technologies *for* students, *for* student success

Dr Megan Kek
Learning, Teaching and Quality, Academic Services
Inaugural Student Experience Conference
4 & 5 Dec| Sydney

- To cite this presentation as:

  Kek, M. Y. C. A. (2013). *Student Personalised Academic Road to Success (SPARS): Creating interconnections between students, academic learning and technologies for students, for student success*. Paper presented at the Inaugural Student Experience Conference 2013, Mariott Hotel, Sydney.

Filip Federowicz, Puzzle, used under a Creative Common Attribution License, from http://www.flickr.com/photos/filu/4899342532

" Students who learn are the finest fruit of teachers who teach. Teachers possess the power to **create conditions** that can help students learn a great deal or keep them from learning much at all"

Source: Palmer, P. J (1998), *The Courage to Teach*, San Francisco: Jossey-Bass

What is Student Success?

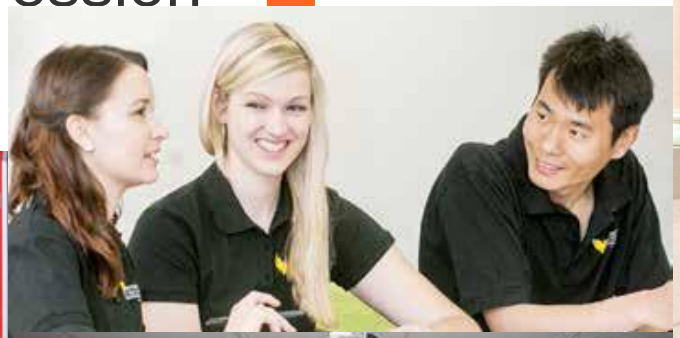
UNIVERSITY OF SOUTHERN QUEENSLAND

Persistence

Progression

Timely Completion

Graduation



Outline of presentation

- What is SPARS?
- Where did we get this idea?
- How is it done?
- Where is the proof?

Are these the challenges at your institution/context?

- More external/regulatory quality demands – threshold standards, outcomes XYZ…
- More/widening participation/access to HE – increase student numbers, increased diversity …
- More efficiencies/constraints – budget cuts, staffing cuts, research funding cuts …

About USQ ...

Study wherever you are ...

On-campus

Online

Study online or with one of our partners.

USQ Fraser Coast ▸ | USQ Toowoomba ▸ | USQ Springfield ▸ | Online ▸

USQ is a part of RUN

- Regional Universities Network
  - Central Queensland University
  - Southern Cross University
  - University of Ballarat
  - University of New England
  - University of Sunshine Coast

RUN students

- Over 100,353 higher education students across 29 campuses
- •25% of all regional and remote students
- •34% of all distance students
- •16% of all low socio-economic students
- •15% of all Indigenous students
- •32% of all students in enabling courses
- •Many students first in family and/or mature age.

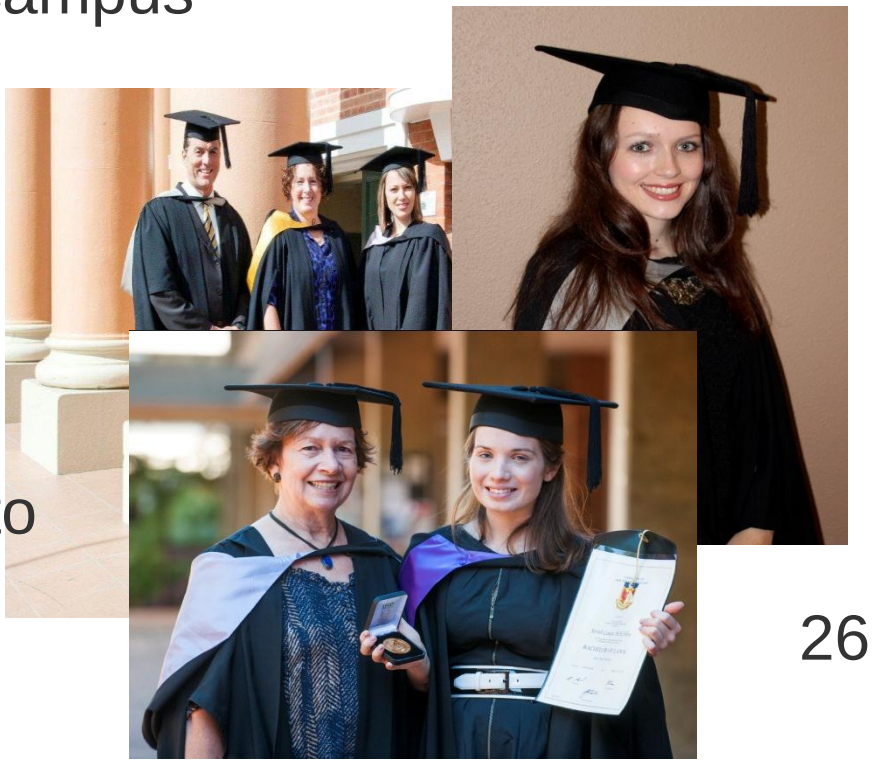
Source: Perkins (2012)

USQ students

20% international student load

25% on-campus

101 countries



75% external

23% low SES

First in family to attend uni.

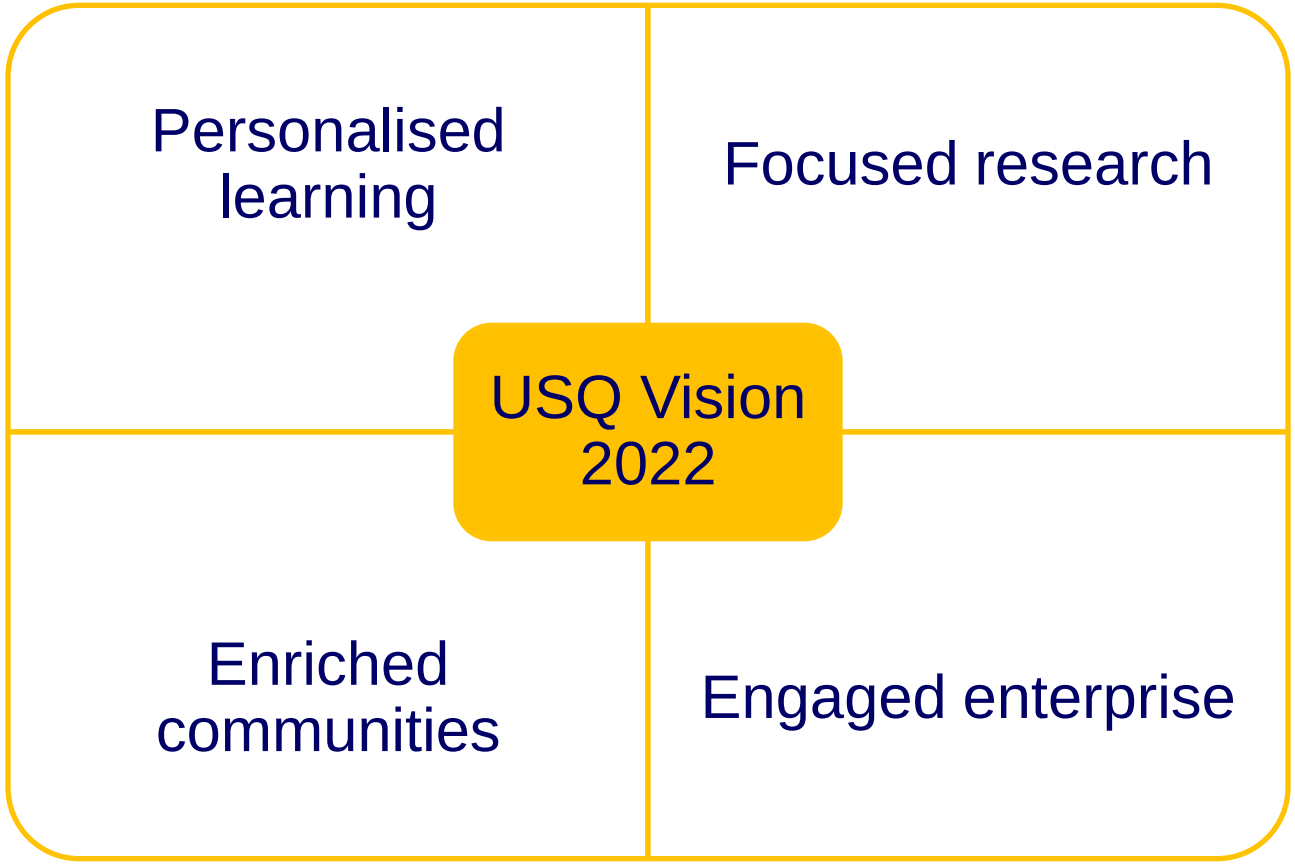
60% over 25 yo

26 median age

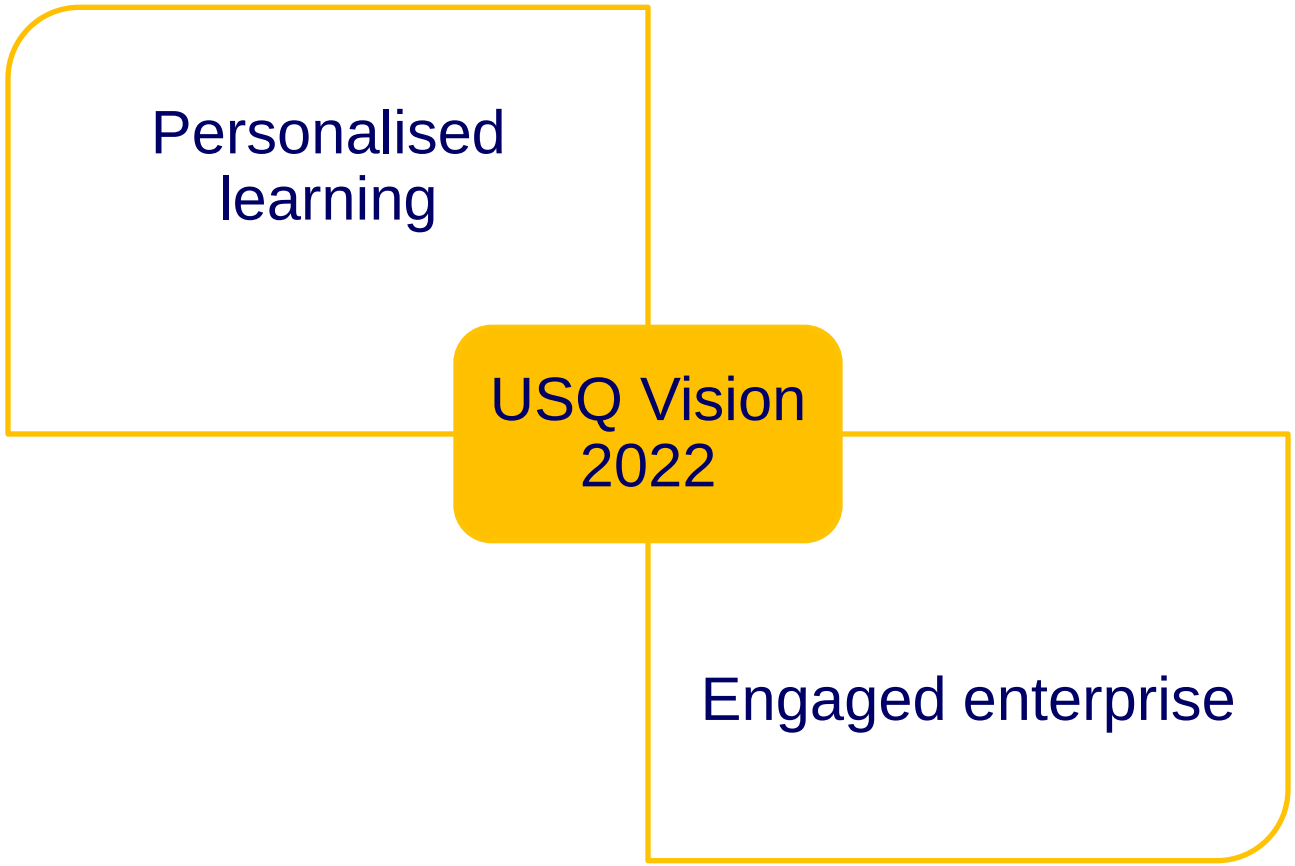
Study PT

23% low SES

Work FT


Personalised learning
Focused research
USQ Vision 2022
Enriched communities
Engaged enterprise

Internal drivers

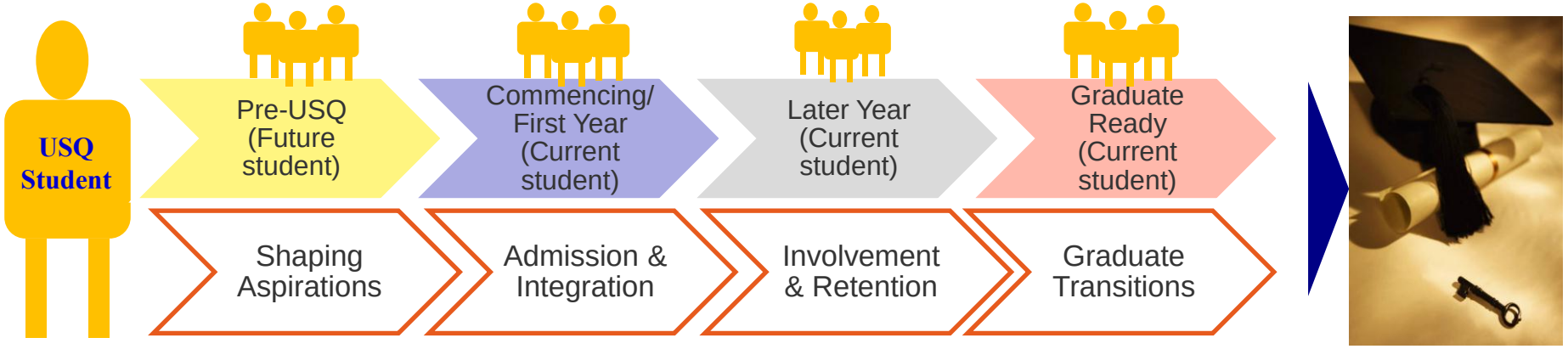


You As A Machine, Peeble pathway outside Nitobe Japanese Garden UBC Vancouver, used under a Creative Commons Attribution Licence, from: http://www.flickr.com/photos/82815184@N03/7672187048

"The whole is greater than the sum of parts"
- Aristotle -

Marrying as many parts of learning together
to form the **interconnections**
that are more likely to produce
more effective educational experiences for students
(Pascarella & Terenzini, 2005)

Connector idea 1



Support between students & university environment **throughout student academic journey** (Bronfenbrenner, 1979)

More satisfied with educational experience, (Coates & Ransom, 2011)

More likely to stay in the institution (Coates & Ransom, 2011)

Connector idea 2

Different developmental 'highways' of learning
(Chickering & Reiser, 1993)

Presence of learning processes in interactions of the immediate environments
(Bronfenbrenner & Ceci, 1993)

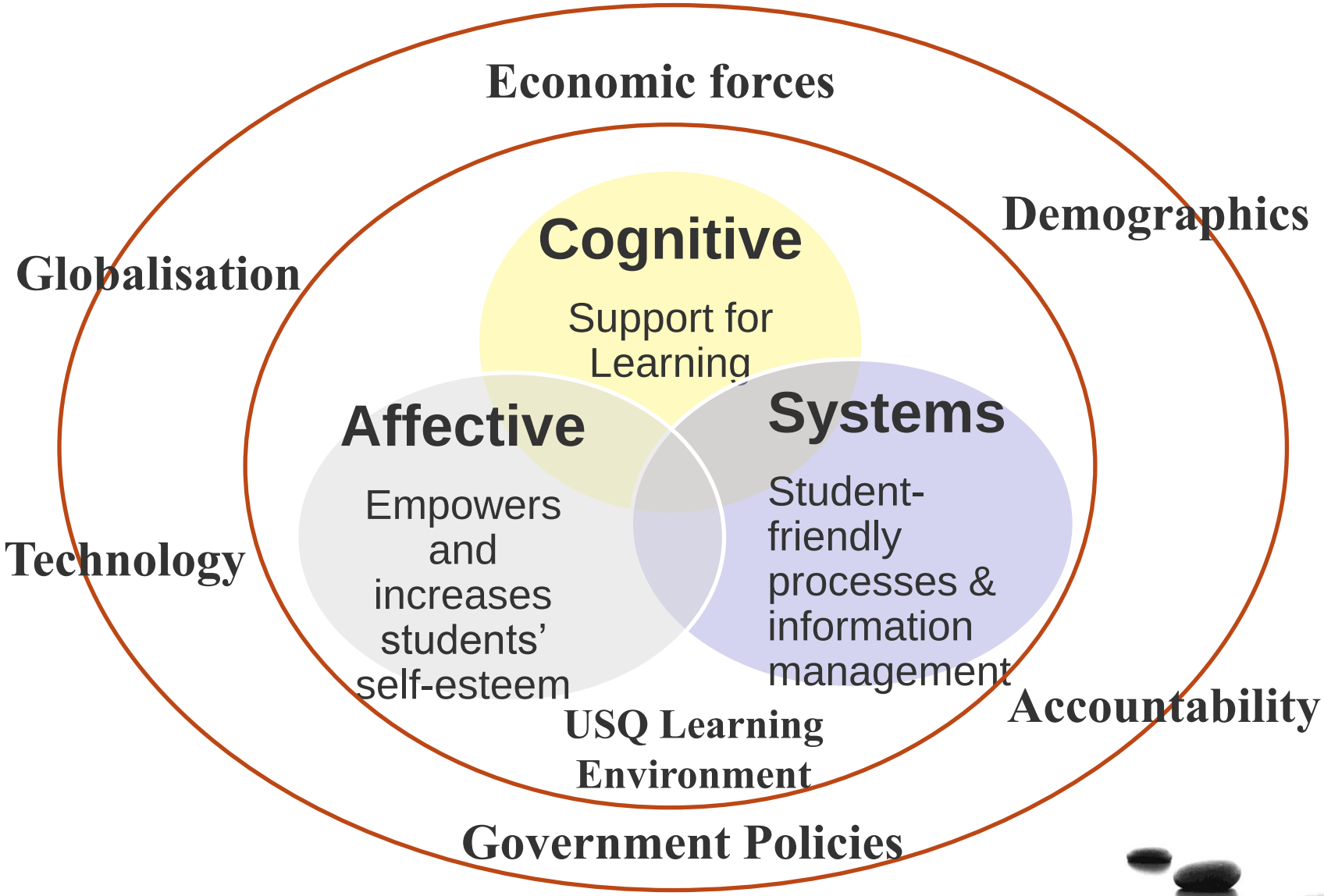
Just-in-time & messy learning (different vectors), enmeshed, in a student's academic learning journey

Academic Student Support Learning Environment

Abundant

Disconnected, Silos

Connector idea 3



Adapted from: Bronfenbrenner (1979), Tait (2000), Kuh et al (2007)

It’s also about the ‘elephant in the room’: TEQSA

Of primary importance

PRS 6.5 The higher education provider identifies and adequately meets the varying learning needs of all its students, including:

- the provision of orientation courses and transition support; and,
- ongoing academic language and learning support.

PCS 2.7 The higher education provider offers an extensive range of student services, including student academic and learning support, and extensive resources for student learning in all disciplines offered.

PCS 2.9 The higher education provider has systematic, mature internal processes for quality assurance and the maintenance of academic standards and academic integrity.

PCAS 4.4 The higher education provider has effective mechanisms to identify and support students who are at risk of not progressing academically.

Of secondary importance

PRS 4.1 The higher education provider’s objectives for its higher education operations include the cultivation in students of critical and independent thought and the capacity for learning throughout life.

PRS 7.3 The higher education provider ensures that all students, regardless of mode of study, have access to one or more contact people who can respond to queries in a timely manner and has effective arrangements to actively maintain contact with and support students who are remote from or away from its locations.

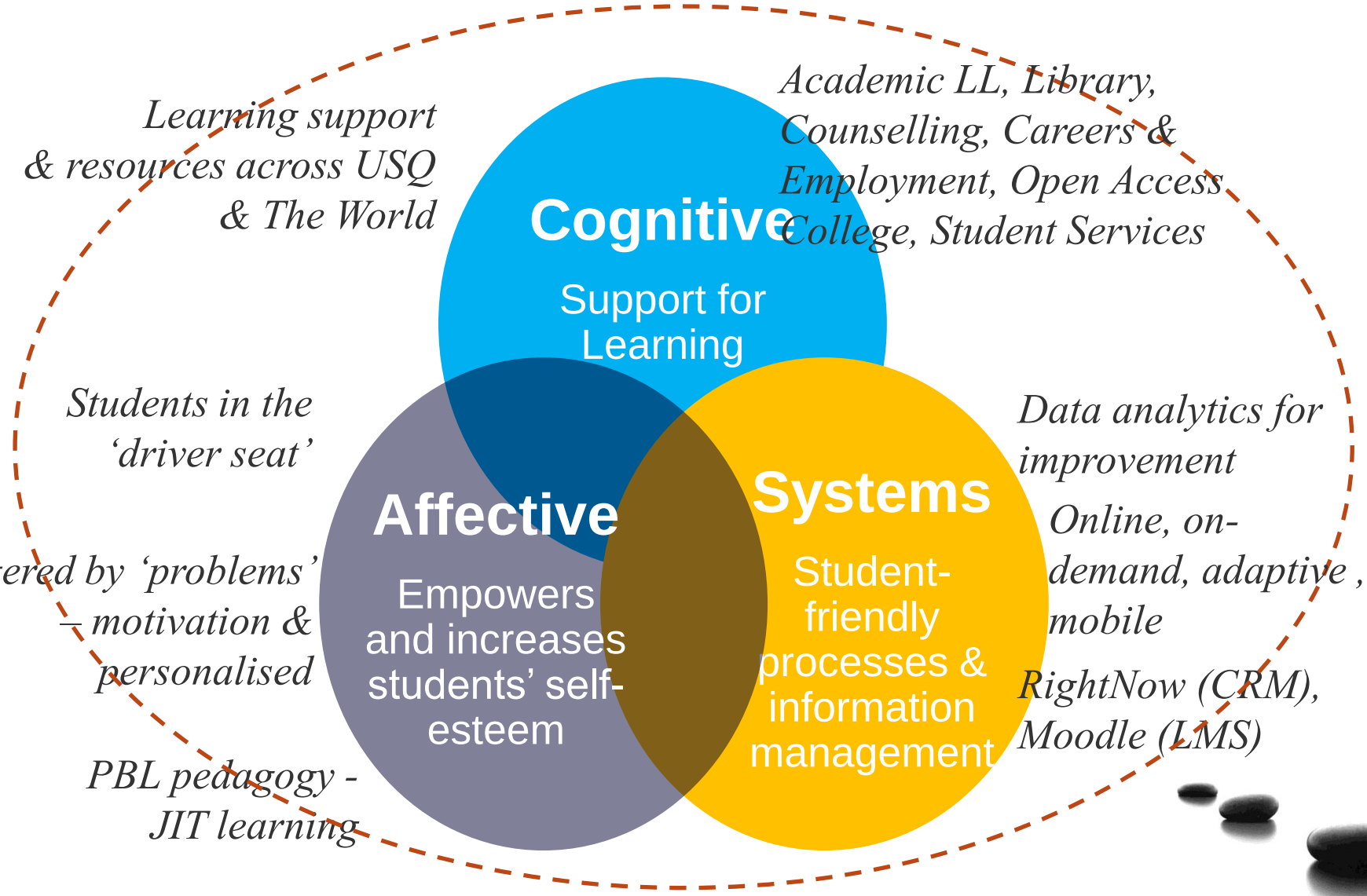
PCAS 2.2 The higher education provider ensures that all students readily have access, directly through the higher education provider or arranged by the higher education provider, to electronic and/or physical library and information resources required to achieve the learning outcomes of the course of study.

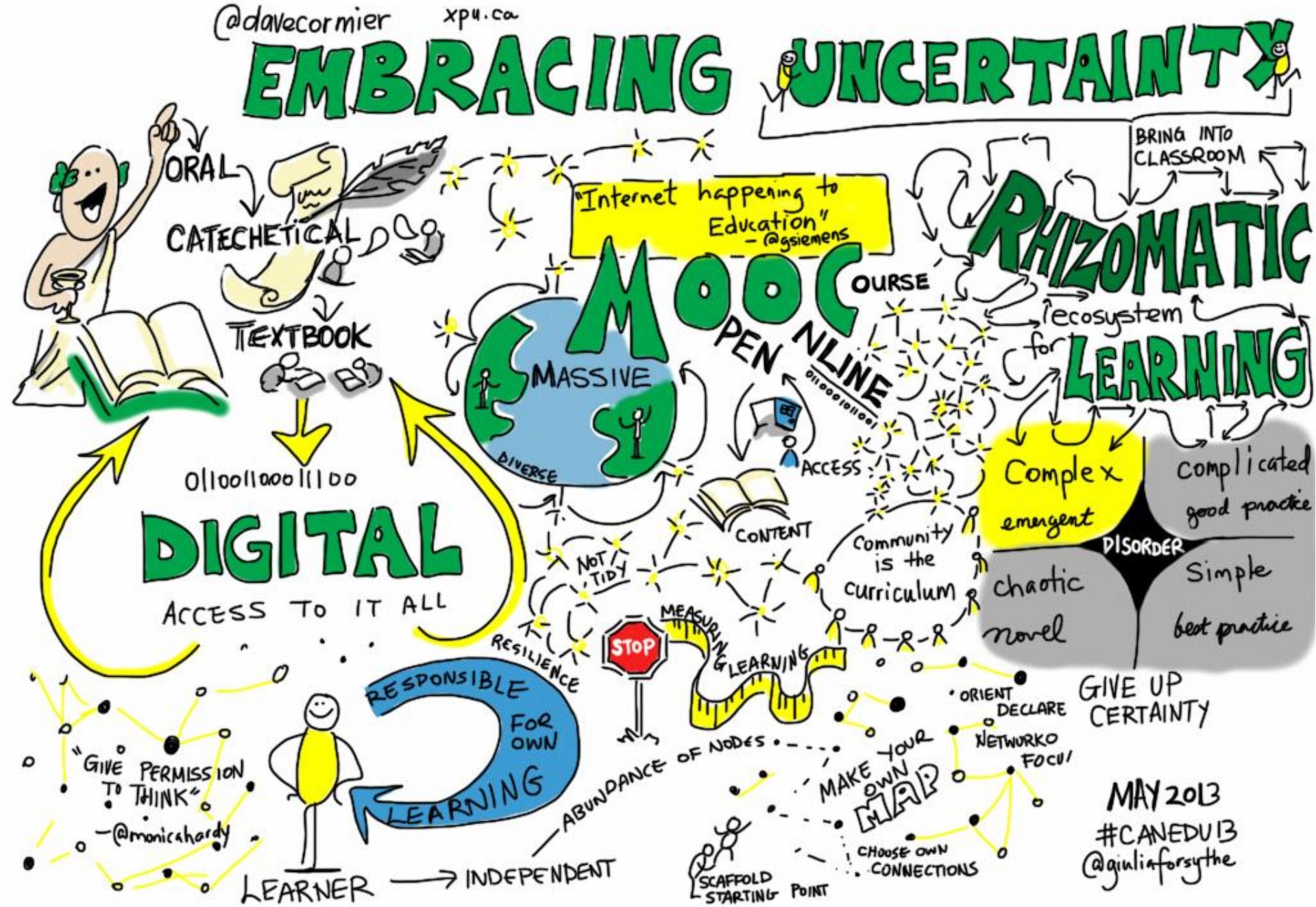
Interconnecting the pieces of puzzle

TEQSA PC 2.3

TEQSA PR 4.1, 6.5, 7.3

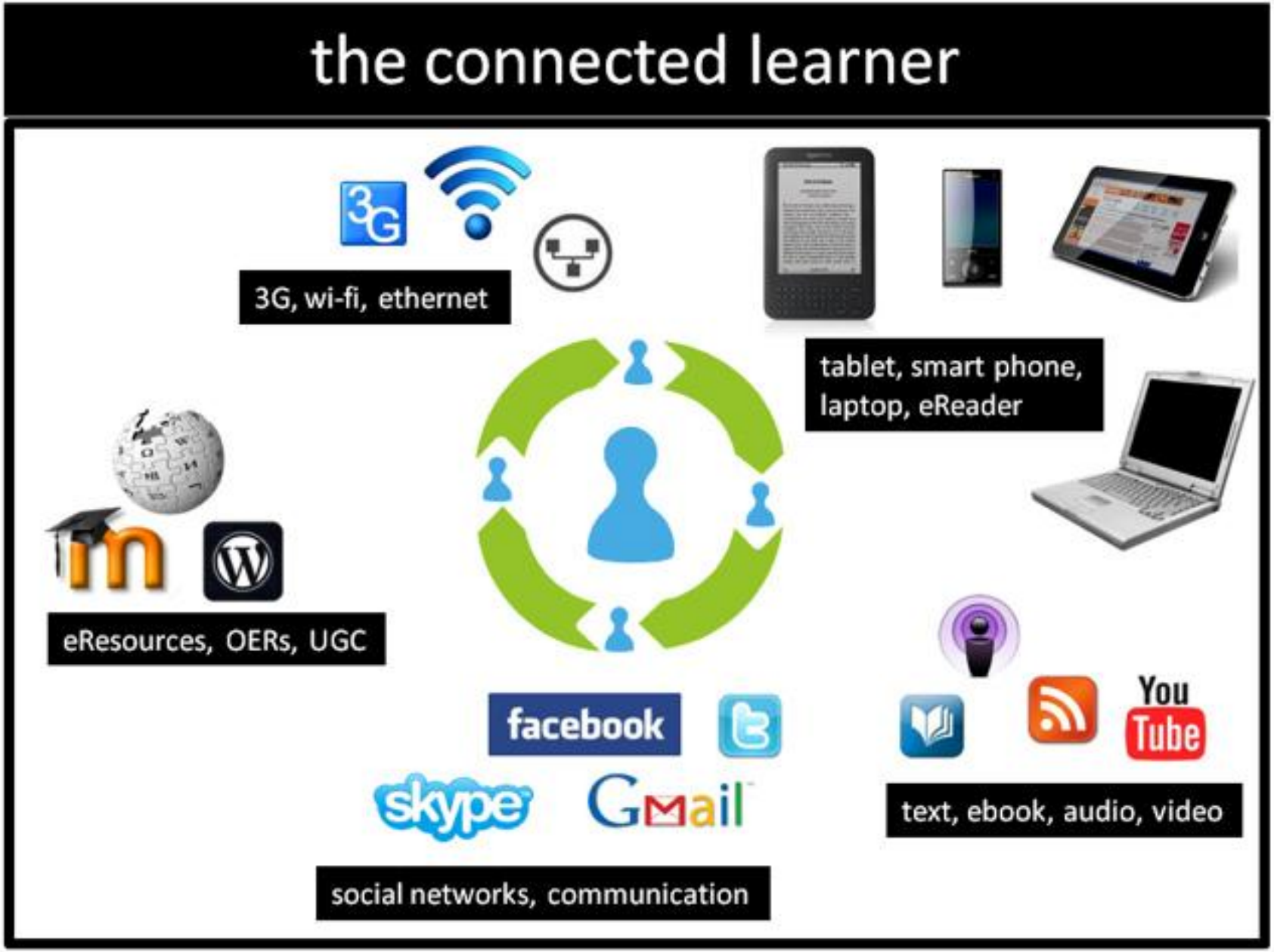
TEQSA PCA 4.4



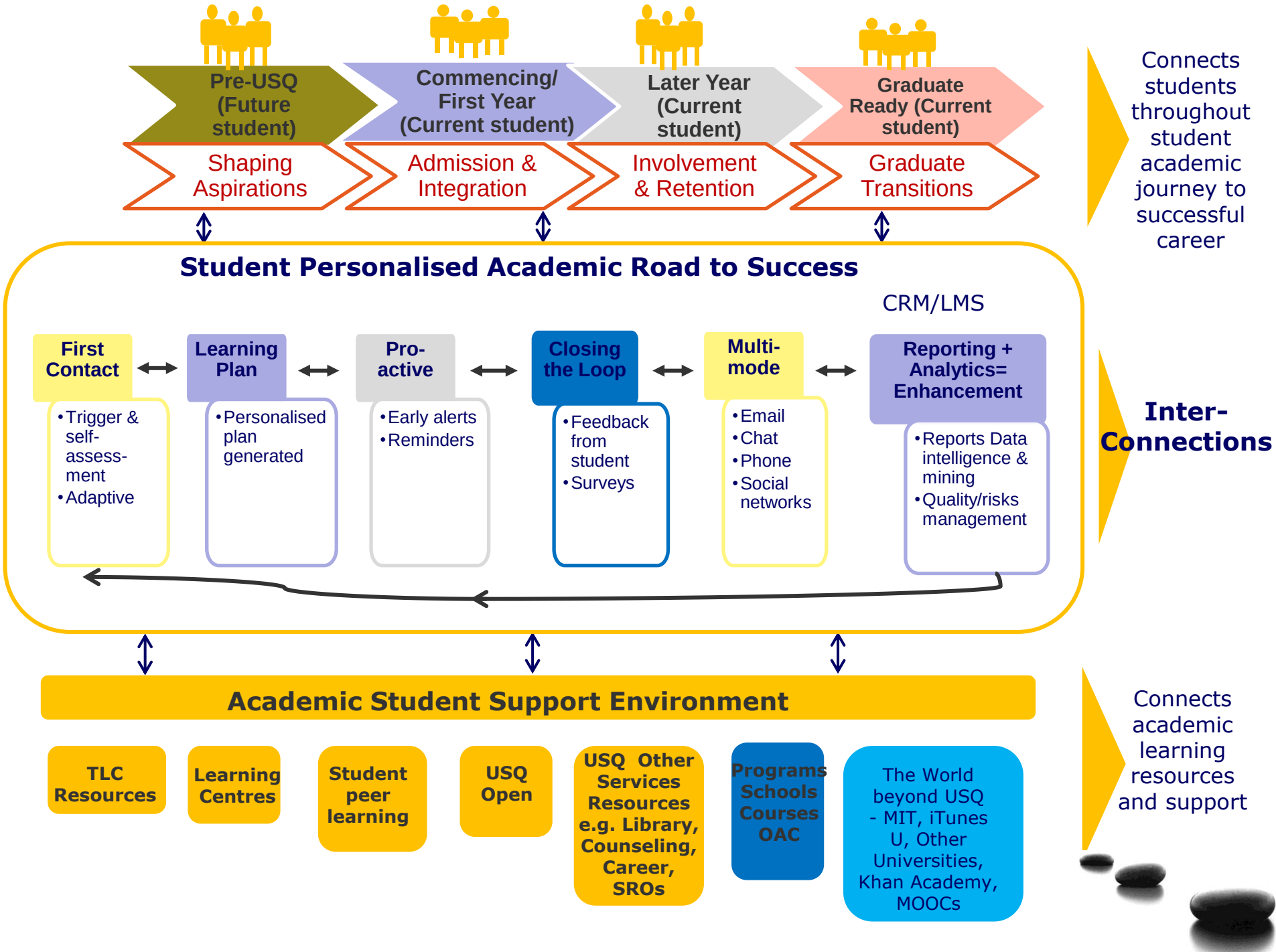


Giulia Forsythe, Embracing Uncertainty, used under a Creative Commons Attribution Licence, from: http://www.flickr.com/photos/59217476@N00/8714270045

the connected learner



Steven Warburton, Connected, used under a Creative Commons Attribution Licence, from: http://www.flickr.com/photos/33763583@N00/5870909268


Pre-USQ (Future student)
Commencing/ First Year (Current student)
Later Year (Current student)
Graduate Ready (Current student)
Shaping Aspirations
Admission & Integration
Involvement & Retention
Graduate Transitions
Connects students throughout student academic journey to successful career
Student Personalised Academic Road to Success
CRM/LMS
First Contact
•Trigger & self-assess-ment
•Adaptive
Learning Plan
•Personalised plan generated
Pro-active
•Early alerts
•Reminders
Closing the Loop
•Feedback from student
•Surveys
Multi-mode
•Email
•Chat
•Phone
•Social networks
Reporting + Analytics= Enhancement
•Reports Data intelligence & mining
•Quality/risks management
Inter-Connections
Academic Student Support Environment
TLC Resources
Learning Centres
Student peer learning
USQ Open
USQ Other Services Resources e.g. Library, Counseling, Career, SROs
Programs Schools Courses OAC
The World beyond USQ - MIT, iTunes U, Other Universities, Khan Academy, MOOCs
Connects academic learning resources and support

UNIVERSITY OF SOUTHERN QUEENSLAND

A look at the Academic Success Planner

UNIVERSITY OF SOUTHERN QUEENSLAND

Need help with your studies?

Create your own study plan for:

- Exams
- Assignment writing
- Working together
- Managing information
- Presentations
- Mathematics
- English proficiency

Academic Success Planner

Planner home

Megan, welcome to your Academic Success Planner

You may be concerned about your success in aspects of your university study.

By completing a few short questions, you can work with your own plan to help you achieve success in your academic study.

It only takes 2 minutes!

Academic Success Planner

Username:

Password:

Logon Cancel

Let's get started, what do you need help with?

- Exams
- Assignment writing
- Working together
- Managing information
- Presentations
- Mathematics
- English proficiency

Which course is this for?

Eg.: ACC1001

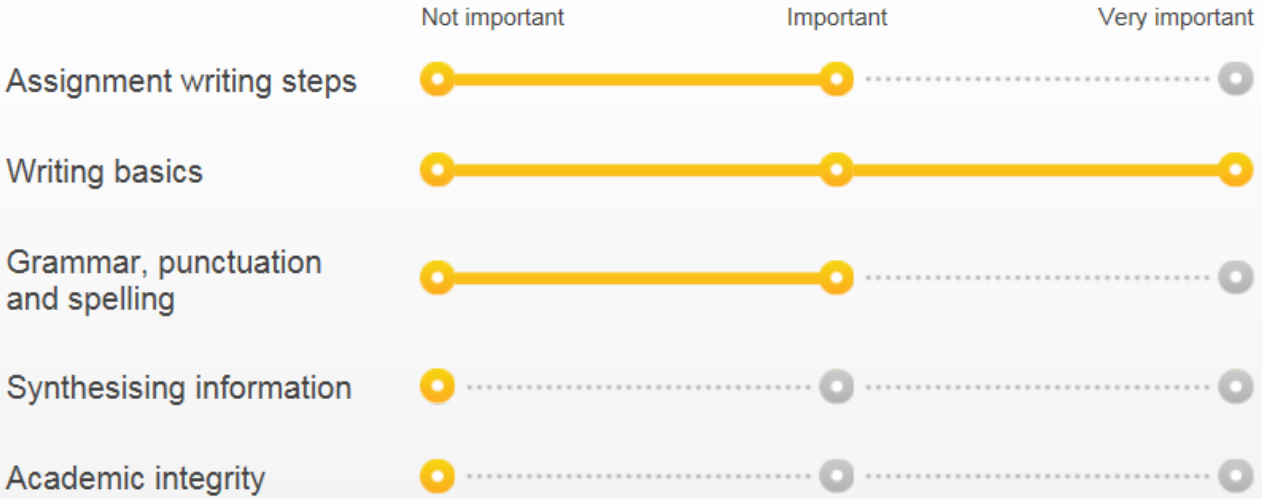
Start now

Contact the Learning Centre

Planner home

Megan, you have chosen Assignment Writing

How important are each of these to you at the moment?



Contact the Learning Centre

Next

Planner home

Success plan

Megan, here is your Academic Success Plan

This has also been mailed to you at megan.kek@usq.edu.au

Analysing information

Analysis of information is the process of categorising and evaluating sources. It involves reflecting on the worth of the information to the task and to forming ideas.

Academic integrity

Academic integrity is about honesty and trust. It is about acting fairly in the use of the words, ideas and creative work of others and not being misleading about your knowledge or the originality of your work.

Sometimes it's difficult to know where to start. Your Student Relationship Officer is always available to support you.

Have you also thought about…

- Attending workshops from the Learning Centre
- Dropping in or booking a student consultation at the Learning Centre
- Catching up with a student leader online at the Meet -Up Student Community (MUSC)
- Looking up Library help to find information
- Looking up Library help with referencing
- Planning ahead and managing your time to study? Check out Student Services - Counselling video on time managment

Other resources that may help...

- Critical thinking activity (University of Wollongong, UniLearn)
- Critical reading checklist (University of Wollongong, UniLearn)
- Using brainstorming techniques to organise ideas (University of North Carolina, The Writing Center)
- Using Excel tables to manage information (Microsoft.com)
- Using EndNote to manage references (EndNote.com)

Didn't find what you were looking for?

Start again

Frequently asked questions

Contact The Learning Centre

Interconnecting Cross-institution Student Support

UNIVERSITY OF SOUTHERN QUEENSLAND

Grammar, punctuation and spelling

Correct grammar, punctuation and spelling is needed for the reader to comprehend your intended meaning.

Assignment writing steps

Find out exactly what you need to do, how and when it needs be done. Analyse the question and brainstorm to guide your research. Record source details. Plan before your write. Write several drafts. Allow time to proof your work.

Sometimes it's difficult to know where to start. Your Student Relationship Officer is always available to support you.

Have you also thought about...

- Attending workshops from the Learning Centre
- Dropping in or booking a student consultation at the Learning Centre
- Catching up with a student leader online at the Meet -Up Student Community (MUSC)
- Looking up Library help with assignment research
- Looking up Library help with referencing
- Juggling your assignments with work and life in general? Check out Student Services - Counselling tips for finding the balance
- Getting ready for the world of work? Check Student Services - Careers & Employment's tips on writing a great job application

Other resources that may help...

- A complete guide to improve university-level writing (Writing Commons)
- Tips on editing and proofreading for student writers (Deakin University)
- A vodcast by Turnitin.com on how to run an originality report to check for improper referencing and identify potential plagiarism

Didn't find what you were looking for?

- Start again
- Frequently asked questions
- Contact The Learning Centre

Assignment writing basics

The style and structure of your writing is as important as the content. Write in a simple, yet formal manner using sentences and paragraphs that are clear concise and logical.

Paragraphs

Paragraphs are the building

Academic language

writing is usually
al than other writing
are several
ıs to follow. Use
al voice, be
ınd write clearly,
l concisely

ıore ▸

Sentences

A sentence is a group of words that express a complete idea. Simple sentences can be joined to form compound and complex sentences using conjunctions and punctuation.

Learn more ▸

If you can write a well structured academic paragraph, you will produce a well written assignment.

Trigonometry

Trigonometry focuses on the relationships between angles and the lengths of the sides of a right angle triangle. You may remember SOH CAH TOA to calculate the sin, cos, and tan, or Pythagoras' Theorem for calculating the length of an unknown side. This module extends to work with the trigonometric functions and radian measure.

The Trigonometric Ratios

Trigonometric ratios, finding the angle within a given domain, a real world example of using the trigonometric ratios and the exact values for angles: 30°, 45° and 60°.

Learn more ▸

Radian measure

How to convert between radians and degrees. How to calculate arc length.

Learn more ▸

Graphs of trigonometric functions

Showing the graphs of sin x, cos x and tan x and their properties including an application of the general form of the sine function
$y = \sin B(x-C) + D$.

Learn more ▸

Other Trigonometric rules

Using Pythagoras' theorem and the trigonometric identities, the sine and cosine rules, area of any triangle and the compound angles rules.

Learn more ▸

When problem solving, determine what is required, draw a diagram and break the problem into smaller parts.

UNIVERSITY OF SOUTHERN QUEENSLAND

Academic Success Planner

- Planner home
- Success plan
- Writing steps
- Research the topic

Research the topic

1 2 3 4

Finding information

- Start with background reading e.g., lecture notes, core texts
- Move onto more detailed sources e.g., journal articles, specific texts, and credible websites
- Use the Library search engine, other relevant databases, Google Scholar
- Look for sources that are current, authoritative and relevant
- Contact a librarian for help

To do

- Background reading (USQ Library)
- Finding information (USQ Library)
- Evaluating information (Monash University)
- Library Search (USQ Library)
- Knowing Databases in USQ (USQ Library)

- Planner home
- Success plan
- Logarithms
- Expo Laws & Rules

Exponent La

1

Use the exponential rules to solve equations

- In any equation, if the unknown is inside a power, you can use roots (e.g. square roots) to remove the power
- Remember to follow the rules and principles of algebra.

For example:

James invested $100 in an account. After 20 time periods, the investment returned $180, what was the interest rate per period for the investment.

We need to use the compound interest formula

$$A = P\left(1 + \frac{r}{100}\right)^n$$

To do

- Transposing formulae: Diagnostics (mathcentre)
- Transposing formulae: Exercises (mathcentre)

More info

- Rearranging formulas 2 quick reference (mathcentre)

From: The Learning Centre

To: Megan Kek

Cc:

Subject: USQ - Managing Information Academic Success Plan - Need more help?

Sent: Thu 28/11/2013 6:19 PM

UNIVERSITY OF SOUTHERN QUEENSLAND

Academic Success Planner

Hi Megan

Now that you have created your Managing Information Academic Success Plan, we want to ensure that you have all the help you need to achieve success in your studies.

Remember you can go back to your plan at any time, or create a new plan with different priorities.

The Learning Centre offers a range of services and assistance so if you have any questions, please contact us.

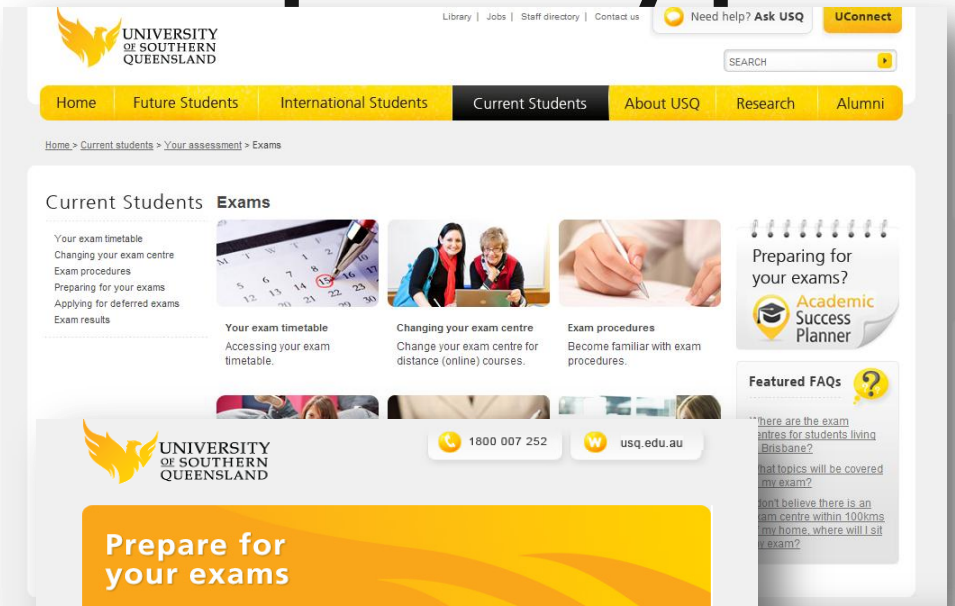
Good luck with your studies!

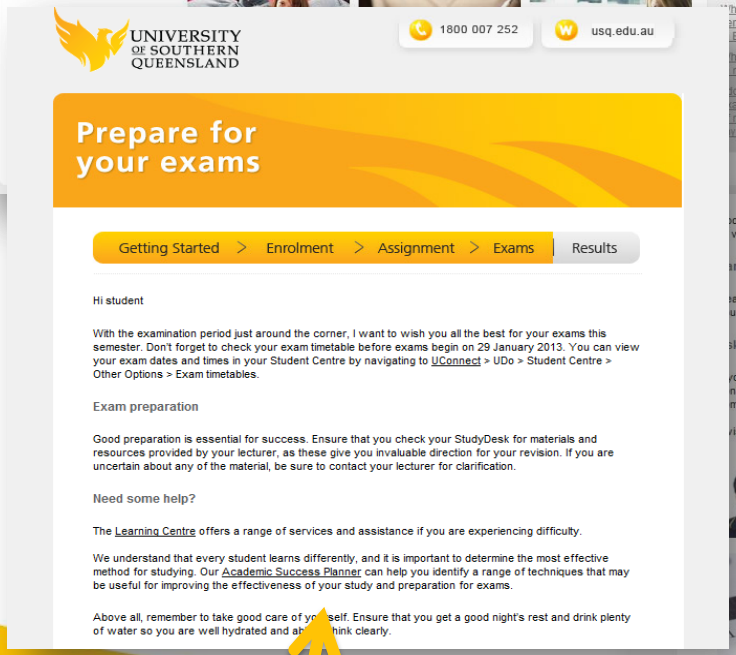
Kind regards

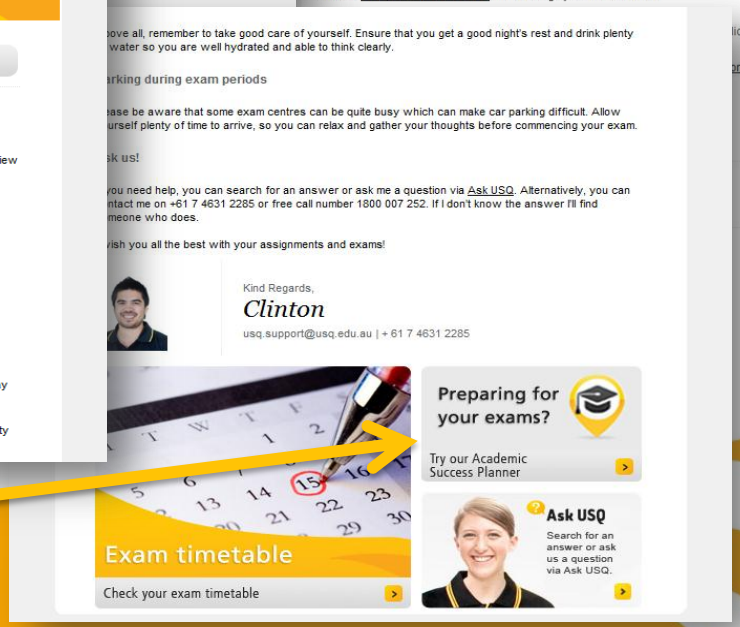
The Learning Centre
tlc@usq.edu.au | + 61 7 4631 2751

© University of Southern Queensland | Toowoomba QLD 4350 Australia | ABN: 40 234 732 081
CRICOS: QLD 00244B, NSW 02225M | TEQSA PRV12081

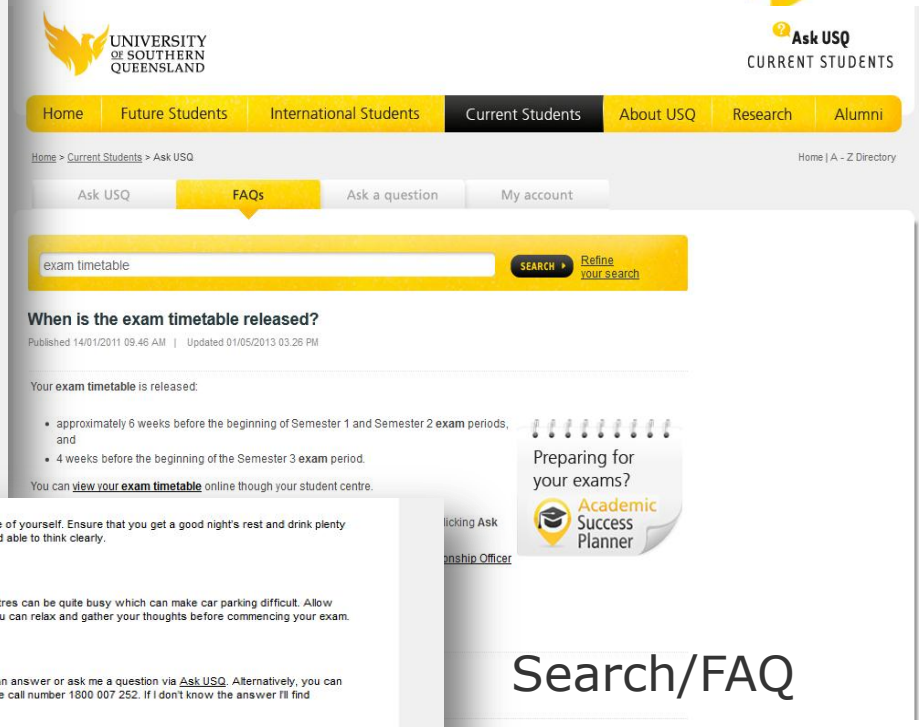
Multiple entry points







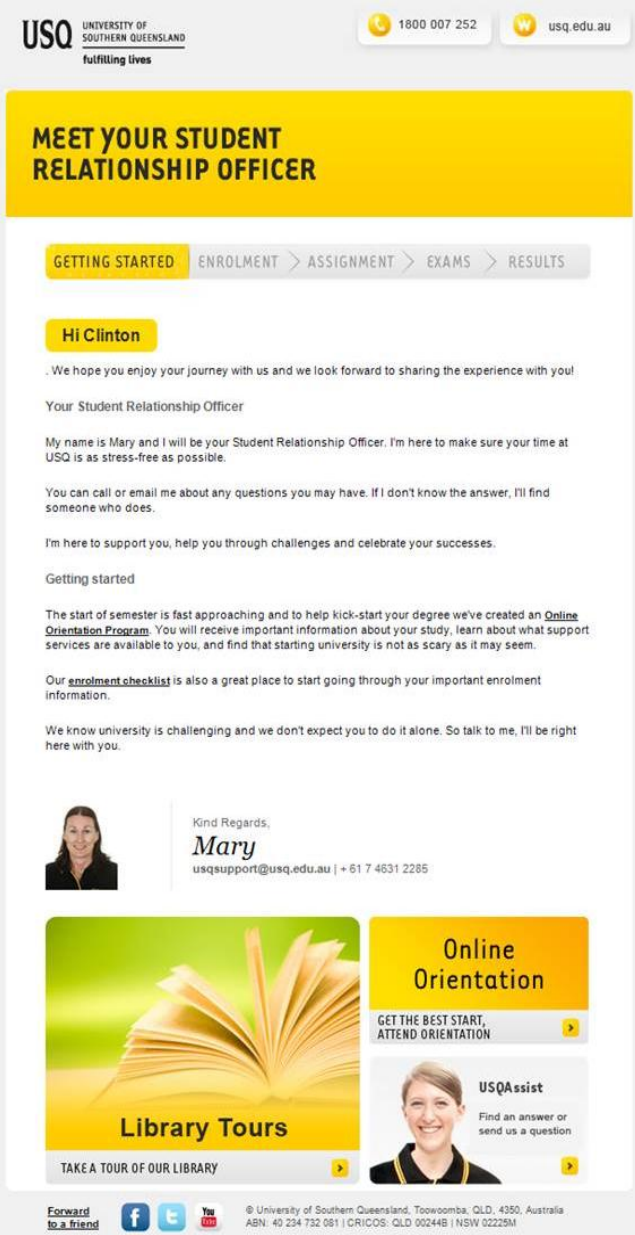
USQ Web

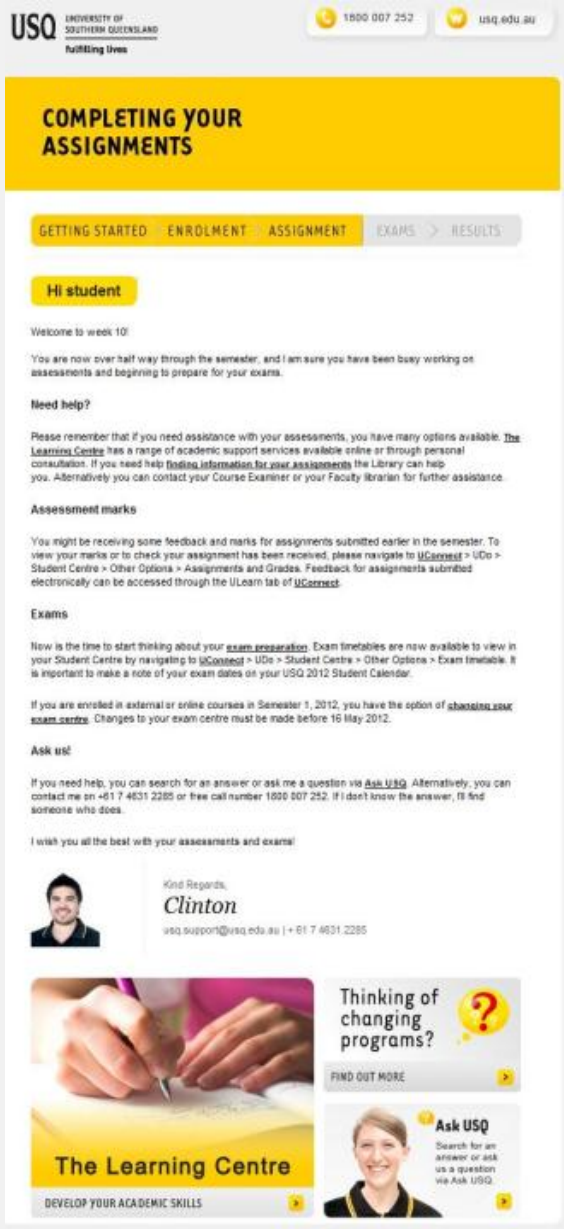


Search/FAQ

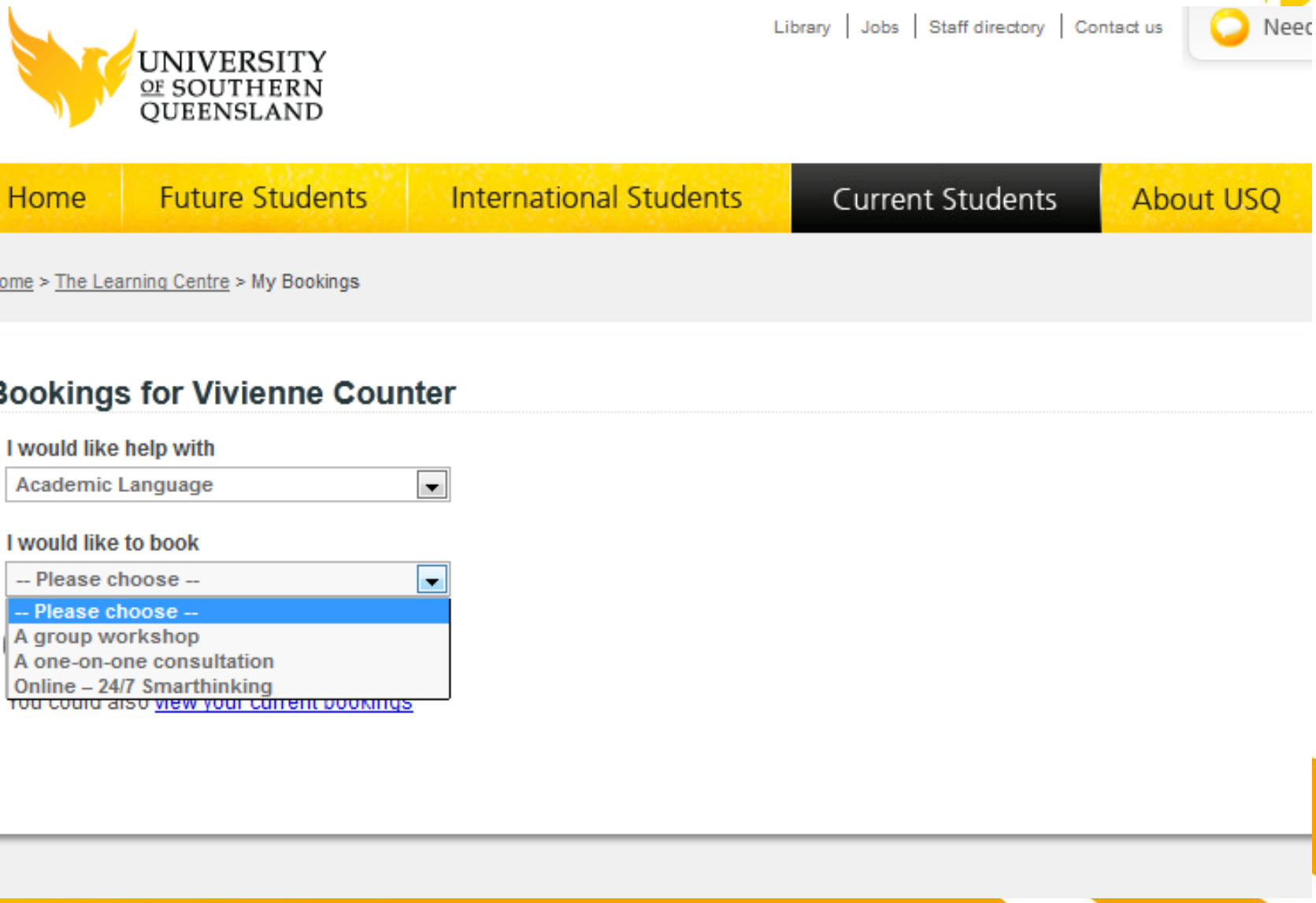
Student Relationship Officer communique

Multi-mode communication





Self-booking system



UNIVERSITY OF SOUTHERN QUEENSLAND

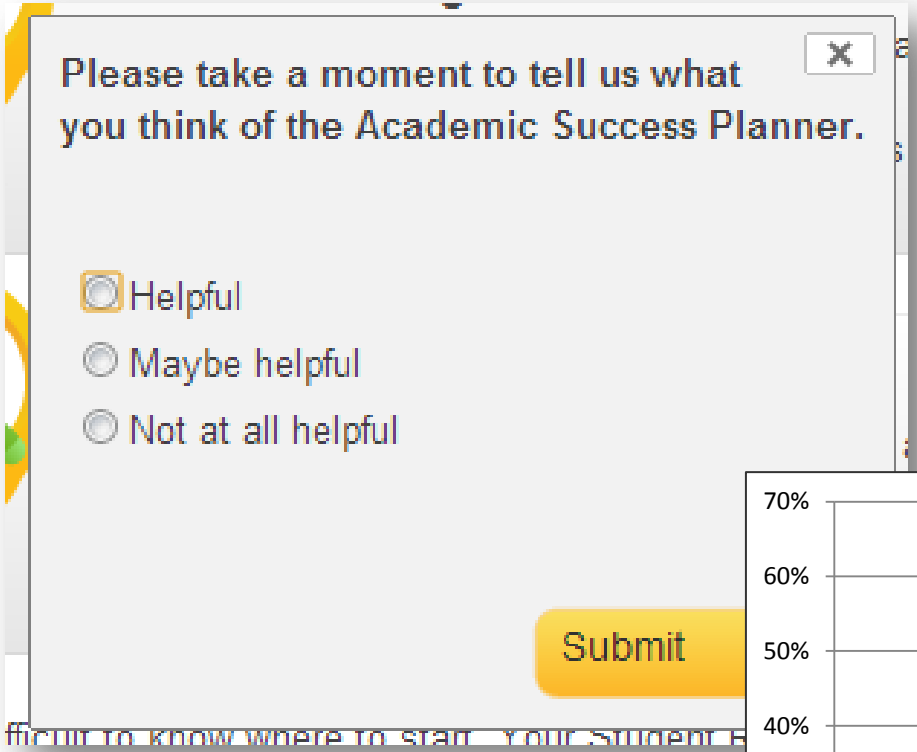
Proof of Concept?

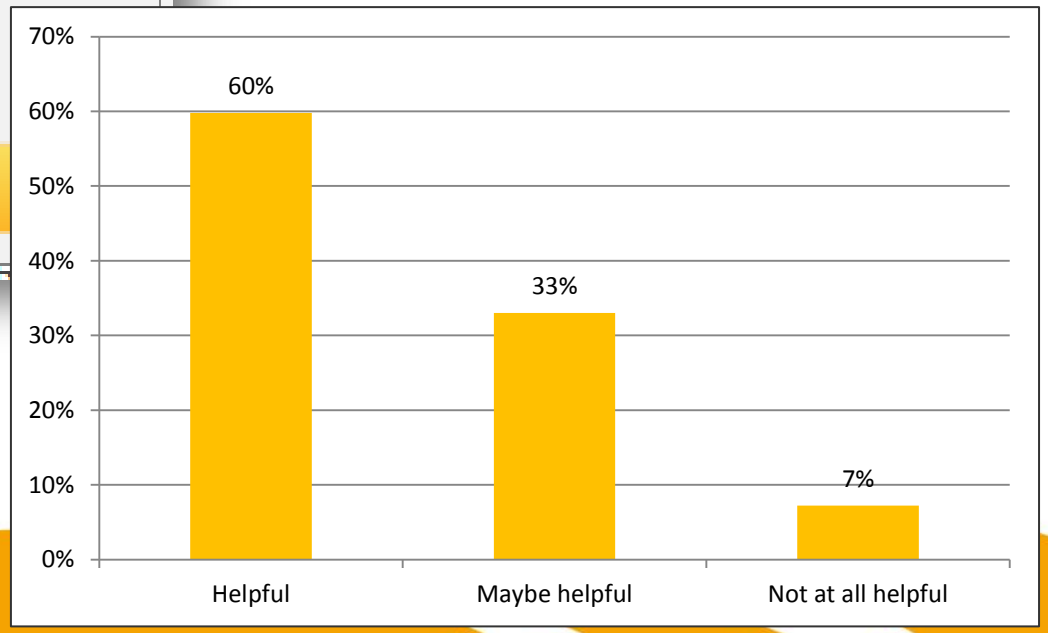
Pilot findings

- Online survey, summative (post experience)
  - Small numbers, less than 30
  - 58% response rate (opened emails)
  - 72% Ext, 28% On-campus
  - 78% UG, 22% PG

- Student interviews
  - 12 students
  - 75% Ext, 25% Oncampus

Polling (during experience)





What about personalisation and adaptivity?

- Easy to navigate
  - 55.6% agree
  - 44.4% strongly agree
- Ease of use
  - 50% agree
  - 50% strongly agree

Student experience (survey)

- Students were asked to rate their experiences with ASP from a little, a moderate amount, a great deal, not yet …
  - Helped me achieve the results I wanted (77.8%)
  - Helped me with my studies (89%)
  - Increased my confidence to successfully learn what I was studying (89%)
  - Provided me with the support I needed to successfully complete my course/s (83%)

Student voice (interviews)

- Empowering/ Affordances

  "…giving me opportunity to do the best I can .." (High GPA)

  "I found that very helpful in like self-esteem " (Low GPA)

- Confidence

  "..give me more confidence ..I can do that" (Avg GPA)

  " More confident .. a little more insight into basic things about how .." (Low GPA)

- Reassuring

  "..little reminder is really good .. little bit more edge" (Avg GPA)

  " …helped to calm me a bit.. really value resources…an interactive process like that is much better …" (High GPA)

  " I felt relieved … I was stressing out .. just the hints and tips on there … good thing to use as a refresher …" (Avg GPA)

Student voice (interviews)

- Sense of belonging

" Because in classroom .. you've got people you can show ideas …talk and discuss … whereas when you're external .. your're on your own .. work things out for yourself .. Having [ASP] … that has knowledge that can also help you ..you've got that third party there like classroom sort of support .." (Avg GPA)

What about 'learning'?

- *" .. the things that pop out there are … find techniques that work for you …**I think** well …no brainer" (Average GPA)*

  *"…coming back … **I did more** things specifically" (Average GPA)*

  *" …I was heading the **right direction** and **doing the right things** .." (High GPA)*

  *"…one day later I **go back over it** and then within 48 to 72 hours I then go over it a third time ..bit **more guidance** …" (Low GPA)*

  *" ..just **takes** you from one topic to another ..tells you **what to do** (Low GPA)*

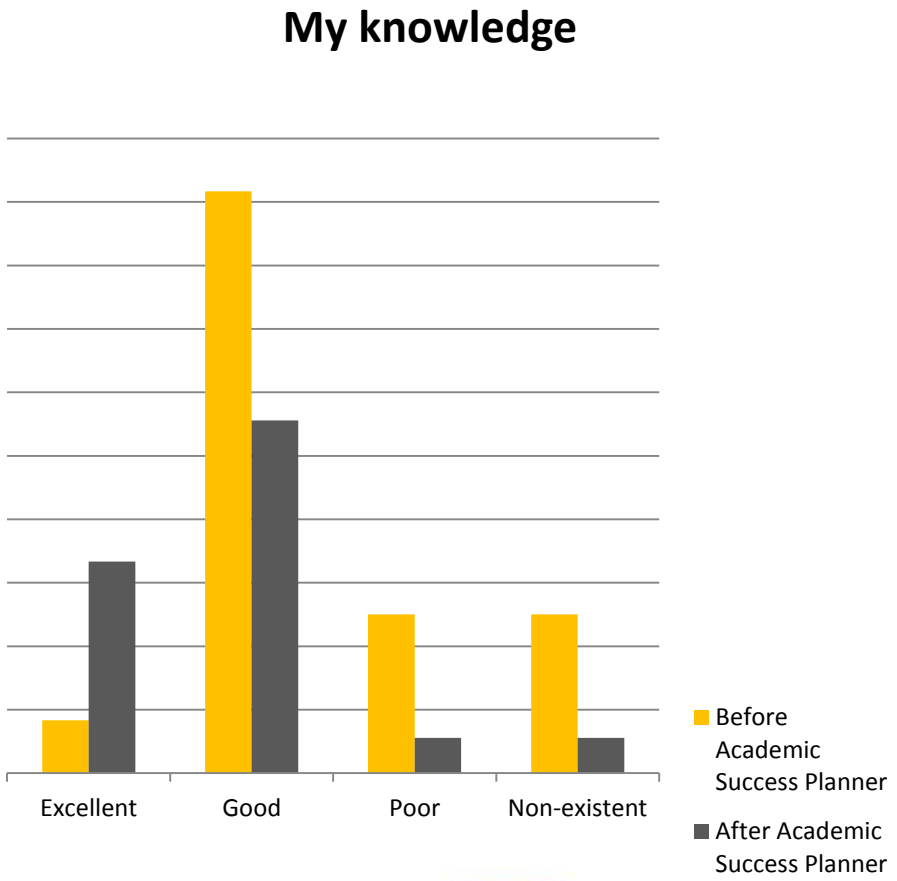
What about 'learning'? (2)

*" just simple, practical and **apply** them to whatever you are studying …that's great" (High GPA)*

*"..they were perfect ..every student take different things .. you actually worked through it yourself ...and figure what is **relevant** and wasn't " (Average GPA)*

Any impact? (survey)

- Statistically significant increase in **knowledge** following ASP support
- z= -2.598, p<0.01
- Large effect size (r=0.59)



Enterprise voice (collaborators)

- Genuine collaboration between professional/ administrative, academic and technologies staff – cross-disciplinary, team based, working together
- Strengthened reciprocal communications – minimise ‘silo’ effects
- Growing awareness of student success from student development approach VS transactional and deficit approach

Summary

- Flipping student support
  - student success/student development NOT retention

- LESS is More
  - Interconnecting the different eco-systems of student support
    - less silos, more seamless, more connections
    - less student co-dependency, more empowering students
    - less 'mass' student support, more adaptive, more personalised

Jonathan Cohen, meta-puzzle, used under a Creative Commons Attribution Licence,
from: http://www.flickr.com/photos/34580986@N03/3762744081

UNIVERSITY OF SOUTHERN QUEENSLAND

Thank you.

References

Bronfenbrenner, U. (1979). *The ecology of human development*. Cambridge, Massachusetts: Harvard University Press.

Bronfenbrenner, U., & Ceci, S. J. (1994). Nature-nurture reconceptualized in developmental perspective: A bio-ecological model. *Psychological Review, 101*, 568-586.

Chickering, A. W. & Reiser, L. (1993). *Education and Identity* (2nd ed.). San Francisco: Jossey-Bass.

Coates, H. & Ransom, L. (2011). Dropout DNA, and the genetics of effective support. *AUSSE Research Briefings*, Vol. 11. Melbourne: Australian Council for Educational Research.

Kek, Y. C. M. A. (2012). Integrated Student Learning Journey Initiative (ISLJI) Final Paper:The Integrated Student Learning Journey - Student Personalised Academic Road to Success (SPARS): A Framework for the Provision of Adaptive and Student-directed, On-line, On-demand, Integrated Study Support to Students. Paper submited to the Director, Learning and Teaching Support, Office of Pro-Vice Chancellor (Learning, Teaching and Quality): University of Southern Queensland.

Kuh, G. D., Kinzie, J., Buckley, J. A., Bridges, B. K., & Hayek, J. C. (2007). Special Issue: Piecing together the student success puzzle: Research, propositions and recommendations. *ASHE Higher Education Report, 32*(5).

Pascarella, E. T., & Terenzini, P. T. (2005). *How college affects students: A third decade of research*. San Francisco: Jossey-Bass.

Perkins, C. (2012, 29-31 October 2012). *Diversifying Institutions - Diversifying Engagements.* Paper presented at the Fourth National Student Engagement Conference: Enhancing Retention and Outcomes in a Competitive Environment, The Sebel & Citigate, Melbourne.

Tait, A. (2000). Planning Student Support for Open and Distance Learning. *Open Learning: The Journal of Open and Distance Learning, 15*(3), 287-299.

Tertiary Education Quality & Standards Agency. (2011). Higher Education Standards Framework (threshold standards) Retrieved 1 Nov, 2012, from http://www.comlaw.gov.au/Details/F2012L00003/Download