



Towards an institutional framework for student success

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“People who are raised in the industrial world and who get enthused about systems thinking are likely to make a terrible mistake. They are likely to assume that here, in systems analysis, in interconnection and complication, in the power of the computer, here at last, is the key to prediction and control. This mistake is likely because the mindset of the industrial world assumes that there is a key to prediction and control.”

[Systems expert, Donella Meadows.
<http://donellameadows.org/archives/dancing-with-systems/>



“...self-organizing, nonlinear, feedback systems are inherently unpredictable. They are not controllable...The goal of foreseeing the future exactly and preparing for it perfectly is unrealizable.

...The future can't be predicted, but it can be envisioned and brought lovingly into being. Systems can't be controlled, but they can be designed and redesigned. We can't surge forward with certainty into a world of no surprises, but we can expect surprises and learn from them and even profit from them. We can't impose our will upon a system. We can listen to what the system tells us, and discover how its properties and our values can work together to bring forth something much better than could ever be produced by our will alone.

...Living successfully in a world of systems requires more of us than our ability to calculate. It requires our full humanity – our rationality, our ability to sort out truth from falsehood, our intuition, our vision, and our morality.”

OUR SYSTEM (WITS) PRODUCES...

82% (course) success rate (undergraduate)

Completion	Min time	Min+1	Min+2
3-year degree	32%	53%	58%
4-year degree	38%	49%	55%

2018 data

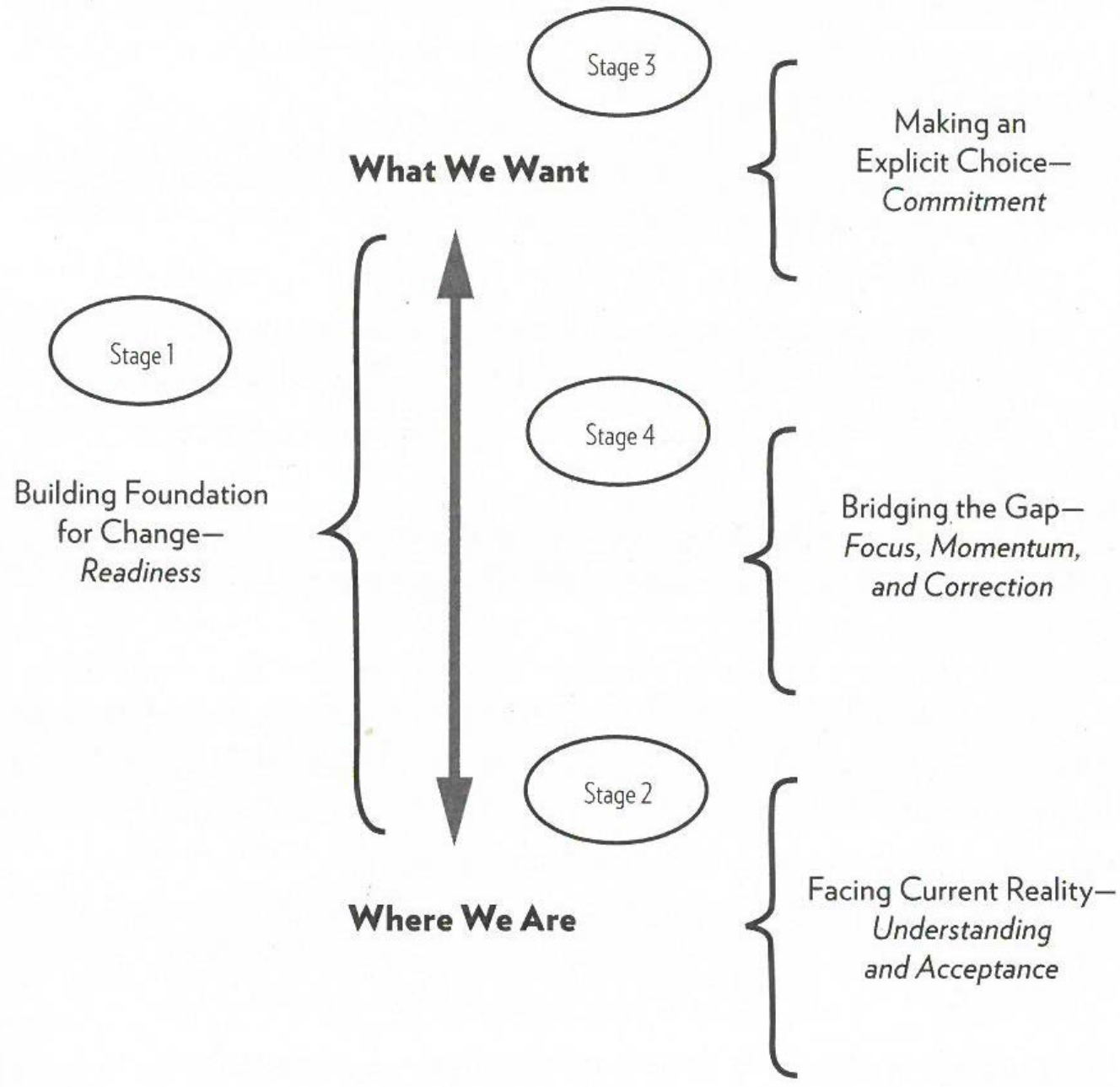
Student factors,
lecturer factors,
course/programme
design factors



High failure
numbers or
rates in key
courses

Four Stages of Leading Systemic Change

From “Systems Thinking for Social Change” by David Peter Stroh (2015).



STAGE 1

Engage key stakeholders, develop shared understanding of what we want to achieve, build capacity for collaboration

DVC, Deans, Assistant Deans: Teaching and Learning, Student advisors, Analytics and Institutional Research Office, Student Affairs, Student Enrolment Centre, University and Faculty Registrars, Business Intelligence Services, ICT, Human Resources, Centre for Learning, Teaching and Development, Student Academic Support, Student leaders, Students, Quality and Academic Planning Office

Aided by Wits systems engineers

LEADERSHIP TEAM

**Senior
Director:
Academic
Affairs**

Dean of
Students

Director:
Business
Intelligence
Services

Assistant
Deans:
Teaching
and
Learning

Head:
Student
Academic
Development

Student
representative

Director:
Centre for
Learning,
Teaching and
Development

COLLABORATION AND INFORMATION SHARING THROUGH...

Presentations and discussions at formal meetings of committees, task teams, working groups, including

- Senate

- Senate Teaching and Learning Committee

- Faculty Teaching and Learning Committees

- University and Faculty Student Success Committees

- Senior Management Group (directors of support divisions)

- First Year Experience Committee

- Student Affairs Advisory Board

- Student Success Framework Task Team

STAGE 2: FACE CURRENT REALITY

1. Baseline survey widely distributed in October and November; 42 responses received.

- Tutorial based programmes (6)
- Mentorship programmes (6)
- Food security programmes (2)
- Health and wellness (4)
- Academic writing programmes (5)
- Student success coordinators (7)
- Employability (3)
- Other (9)

Variously coordinated at School, Faculty and central levels.

2. Workshop for people involved in advising students (March 2019)

Attended by 46 people from:

- Student Enrolment Centre
- Student Affairs (CCDU, Campus Health, WCCO, DLU)
- Faculties (advisers, registrars, Academic Development Units)
- ICT
- Fees Office
- Financial and Scholarships Office
- International Student Office
- Institutional Research
- Business Intelligence Services

Fragmentation of support

Registrar

CFO

COO

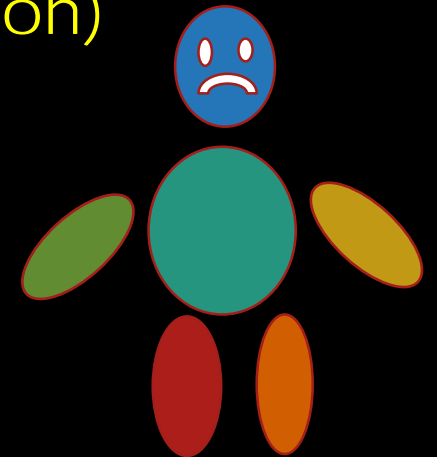
Dean of
Students

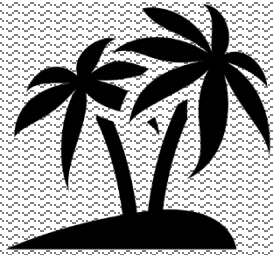
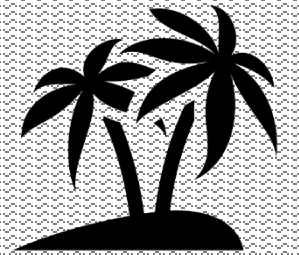
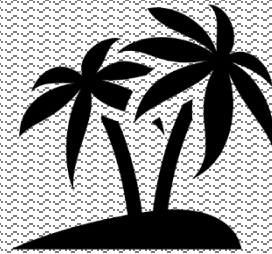
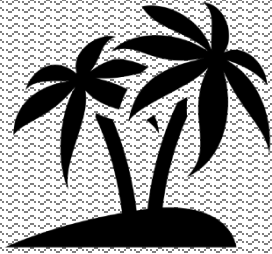
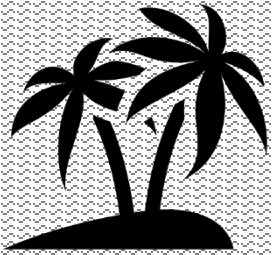
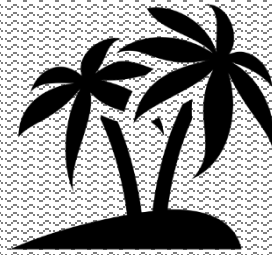
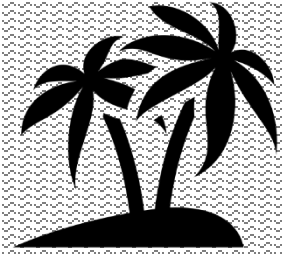
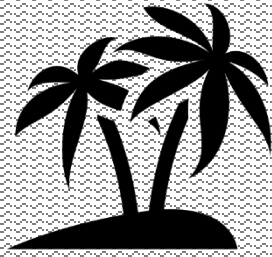
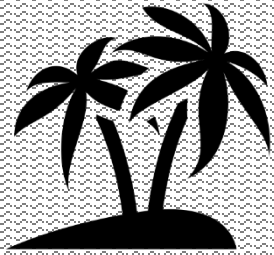
DVC
Academic

Faculty
Deans

Unintended consequences (exacerbated by fragmentation)

Example: Students who fail one subject in some programmes have to repeat a year to redo that subject, may lose funding.





STAGE 3: COMMIT TO WHAT WE WANT

Academic
Achievement

+

Holistic personal
development

Formal
curriculum

Graduates with
valuable attributes
(identified by Wits)

Co-curriculum

Material
needs

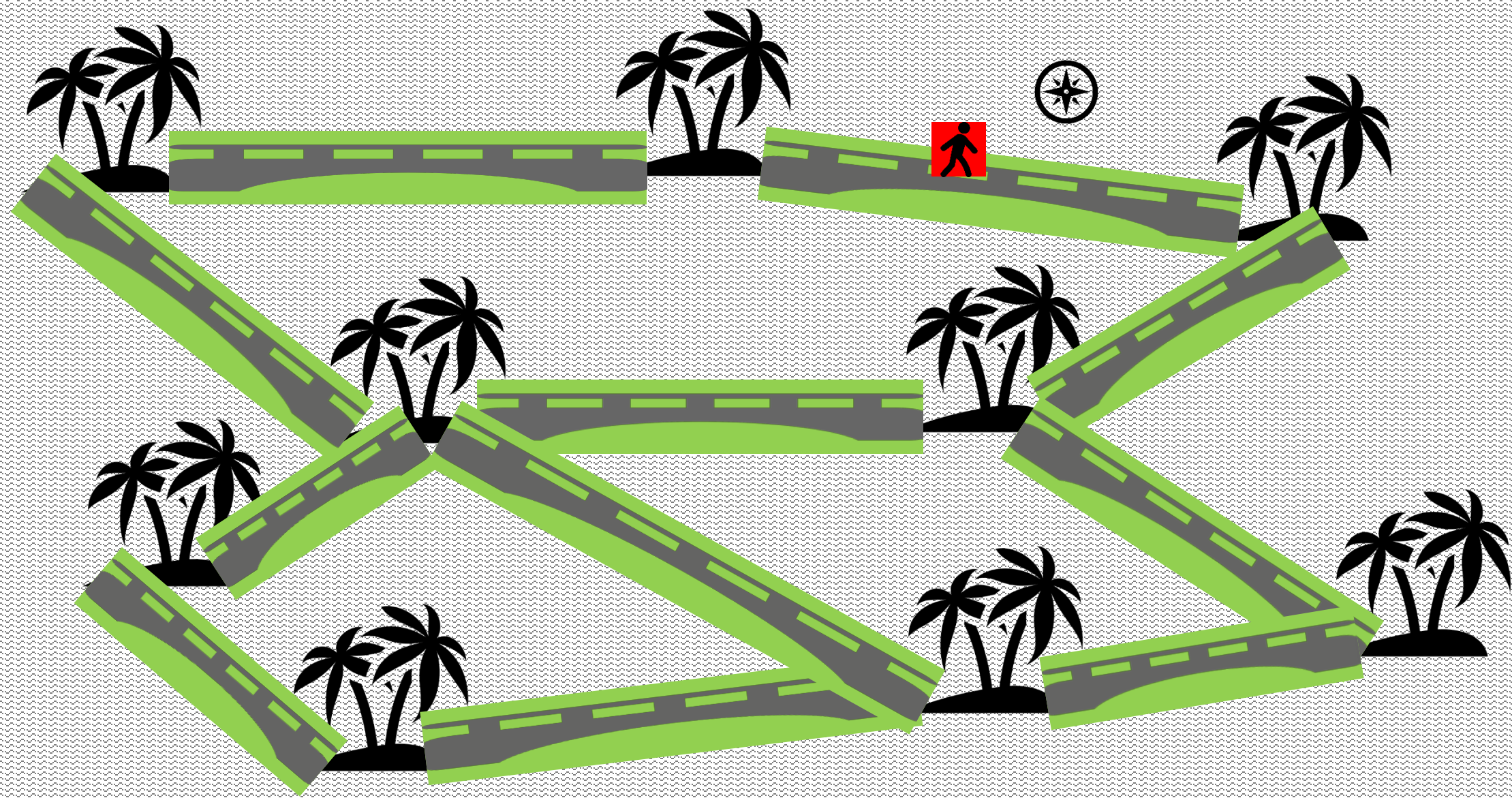
Academic
literacies and
learning skills

Career
guidance

Mental and
physical health
and wellness

Life skills

Framework needed to guide coherent, effective, holistic student success interventions

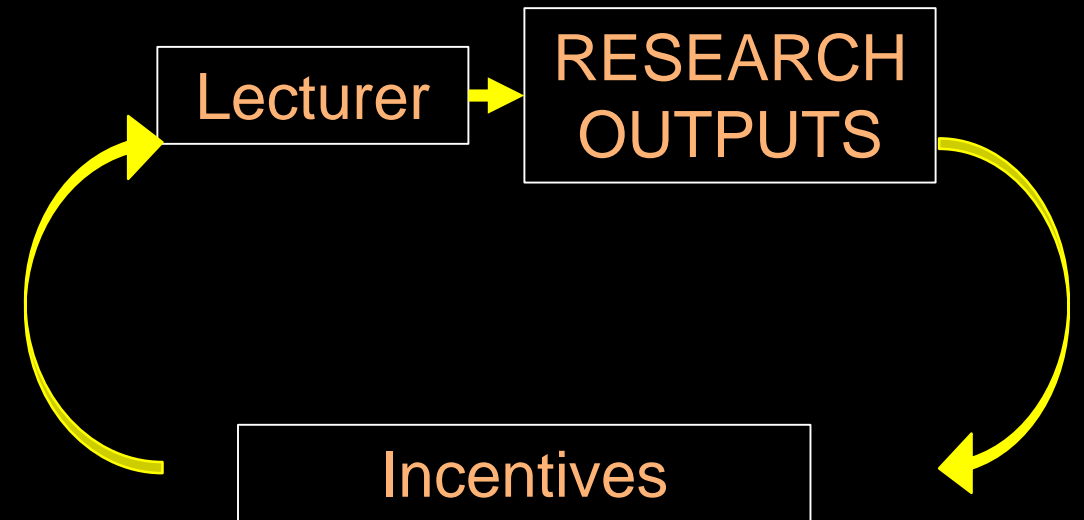


STAGE 4: BRIDGING THE GAP

- Identify causal feedback loops that undermine the goal
- Increase awareness of how the current system functions and how/where it can be changed
- Identify “low-hanging fruit”
- Identify and refine “high-leverage” interventions that have stakeholder support

ADDRESSING NEGATIVE FEEDBACK LOOP: EXAMPLE

- Developing a framework for Continuous Professional Learning for Academics as University Teachers
- Promoting conversations with Research Office, Centre for Learning, Teaching and Development and Assistant Deans: Postgraduate Affairs
- Working with Human Resources and the Research Office to revise promotions criteria



SYSTEM CHANGE NEEDED: EXAMPLE 1

What is supposed to happen

- At the start of the year, academics upload the assessment structure of their courses, with the relative weighting per task to the central SIM system
- Marks for assessment tasks are uploaded continuously
- Towards the end of first quarter, Business Intelligence Services (BIS) draws data from central system and identifies students at risk of failing based on their continuous assessment mark (CAM) to date.
- “At risk” reports sent to faculty-based student advisers for action

What does happen

- Student advisers call in students who could be at risk of failing BUT
- Not all academics upload the assessment structure of their course, and marks not uploaded timeously
- This year particularly bad because new software (Oracle) was installed, there were glitches and some staff struggled to use it. Also, software written for old system by ICT to calculate CAM not done for new software (installed by external provider)

Fix involves DVC: Academic, Deans, Heads of Schools, Academics, Registrar's office, ICT, BIS

SYSTEM CHANGE NEEDED: EXAMPLE 2

Students seek support from different people and units in the university. Each time they go to a new person they have to “tell their story” afresh. We don’t track which support they have received from whom.

Fix involves all student support units/staff (e.g. financial aid, counselling, food pantry, campus health), ICT, BIS, student advisors, student affairs.

We are about to trial an online student success intervention site that will enable advisors to type in student number (linked at the back end to SIMS) and select issue for which student came to them (from a list of 9 categories*), and recommended referrals (from 10 options).

Can’t track if referrals taken up yet. Considering biometric scanners at key offices.

*life skills, academic content support, academic skills, psycho-social issues, financial, accommodation, health, food, career/curriculum

LOW HANGING FRUIT: EXAMPLE

Orientation week

- Before 2019, Orientation week was mostly party time
- In 2018 Dean of Students and Senior Director: Academic Affairs were new
- First Year Experience (FYE) committee constituted
- Orientation week made the focus
- Dean of Students initiated change process with stakeholders, including SRC
- Faculties centrally involved in faculty-specific elements, more academic focus
- Number of FYE ambassadors (senior students) quintupled
- FYE ambassadors appointed as mentors for whole of students' first year

DATA TO STRENGTHEN STUDENT SUCCESS

Visit of Mark Milliron, Civitas Learning (USA) identified the need to:

- move from only data for reporting (retrospective) to data for care (real-time)
- Integrate systems to provide data stream to enable timely, holistic support

Pro-active identification of students needing support

- BIS developing persistence model to predict students likely to need support, those most likely to succeed
- Institutional Research developed Biographical Questionnaire for first year students to identify support needed from the start

DATA and
PROCESSES

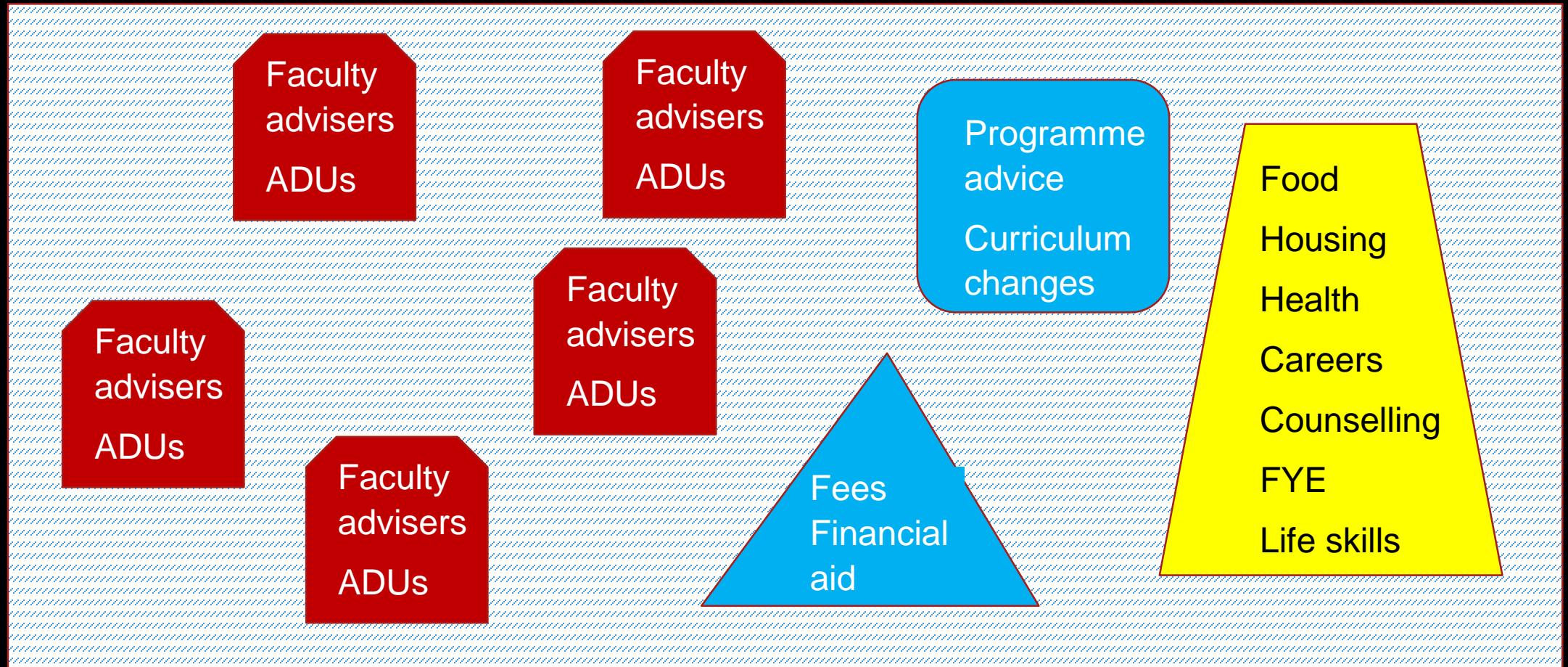
STUDENT SUPPORT LANDSCAPE

 FYE Ambassadors

 Faculty deans

 Admin

 Student Affairs



Registrar

CFO

COO

Dean of
Students

DVC
Academic

Faculty
Deans

Student
enrolment

Financial
aid

ICT

Health care
providers

T&L Centre

Assistant
deans

Psychologists

Student
Advisors

Institutional
Research

FYE

QA

BIS

Student fees

Food security

Academics

WHERE WE'RE HEADING

- A common statement of purpose in relation to student success
- A set of principles, based on research and values, to guide what we do and how
- Action guidelines for what we as a university community do to promote student success and how we do it
- Mechanisms to monitor our success in advancing student success