

First-Assessment First-
Feedback : A “just in time”
intervention to support at-risk
First Year students

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RATIONALE: Why is this important?

- Students' early experiences of university directly influence both their ongoing **learning outcomes & persistence**.
- Students' **performance on assessment**, especially their first assessment item is most influential in this regard.
- How well students perform on their early assessment tasks can initiate either a **virtuous** (building confidence) or **vicious** (decreasing confidence) academic cycle.
- Students who fail, 'just pass' or who 'do worse than expected' on early assessment are likely to suffer a **loss of personal & academic confidence** (Zajacova & Espenshade, 2005).
- This performance feedback may also signal a **gap in study skills and practices, self-management capability or academic efficacy** that may be amenable to early intervention & improvement.

RATIONALE: Can students manage what is expected?

- First year students often do not possess **sufficient self-regulation and problem-solving capacities** to adequately prepare for, or process these potentially challenging experiences, with implications for their subsequent academic engagement, learning outcomes and persistence.
- For example, recent research points to a **lack of fit or incongruence** between staff and commencing students' (mis)-conceptions & expectations of assessment tasks (e.g., What's involved? How best to prepare? What investment is required? What help is available?) (Collier & Morgan, 2008).
- This is even more likely to be the case with **first-generation university students** who, by virtue of their circumstances, may possess significantly less cultural capital and academic resourcefulness (Hattie & Timperley, 2007).

INTERVENTION AIMS: What difference are we trying to make?

- The FAFF process is designed as an **academic recovery**, just-in-time intervention to develop self-management and problem-solving capabilities in first year students.
- Help is initially offered in response to an identified 'academic crisis' or at a period where students are more likely to be responsive because they are engaged with a real problem, namely an 'unexpected result' on their first assessment item.
- First-Assessment First-Feedback particularly **targets** at-risk first year students who failed or marginally passed their first piece of university assessment.

INTERVENTION PROCESS: How do we do it?

An example of “intrusive academic advising” (Earl, 2006)

The intervention involves students:

- 1 Completing a **reflective workbook** to help them understand the reasons for their performance and to identify improvement goals and strategies.
- 2 Participating in an intensive **guided discussion** with their tutor
- 3 Developing an **academic recovery action plan**
4. Negotiating **follow-up** to maintain momentum.

EVIDENCE BASE: Where is the point of optimal leverage?

- Recent cross-institutional multi-level analysis on the efficacy of transitional or preparatory programs for first-year students (Porter & Swing, 2006) indicates that **a more focused approach** linked to specific academic tasks in a particular disciplinary context may be the most effective way to impact on academic capability and persistence.

THEORETICAL FRAMEWORK: WHAT IS SELF-REGULATION?

- **Self-regulation** - a set of metacognitive, behavioural and motivational strategies that learners can use to control their learning processes (Zimmerman, 1990) & actively manage their own learning outcomes (Pintrich (1999)).
- Self-regulation is particularly **required at times of change, stress or transition** where a person is required to respond to new demands & where automatic or routine responses are not sufficient.
- Thus self-regulation is particularly salient in higher education contexts because of the (often implicit) **expectation of independence** placed upon commencing students.

What influences students' capacity to self-regulate?

- Self-management of academic performance can be understood as a function of a **complex array** of interdependent personal & environmental factors

ENVIRONMENTAL FACTORS:

What is the 'contextual swim'
students are in?

Temporal context: Interaction of past, present & anticipated future factors

- Sense of **past** learning experiences → type & level of social capital students bring
- Sense of **future** (personal & career) & motivation for being at university
- Sense of **present** environment – balancing university & work-life

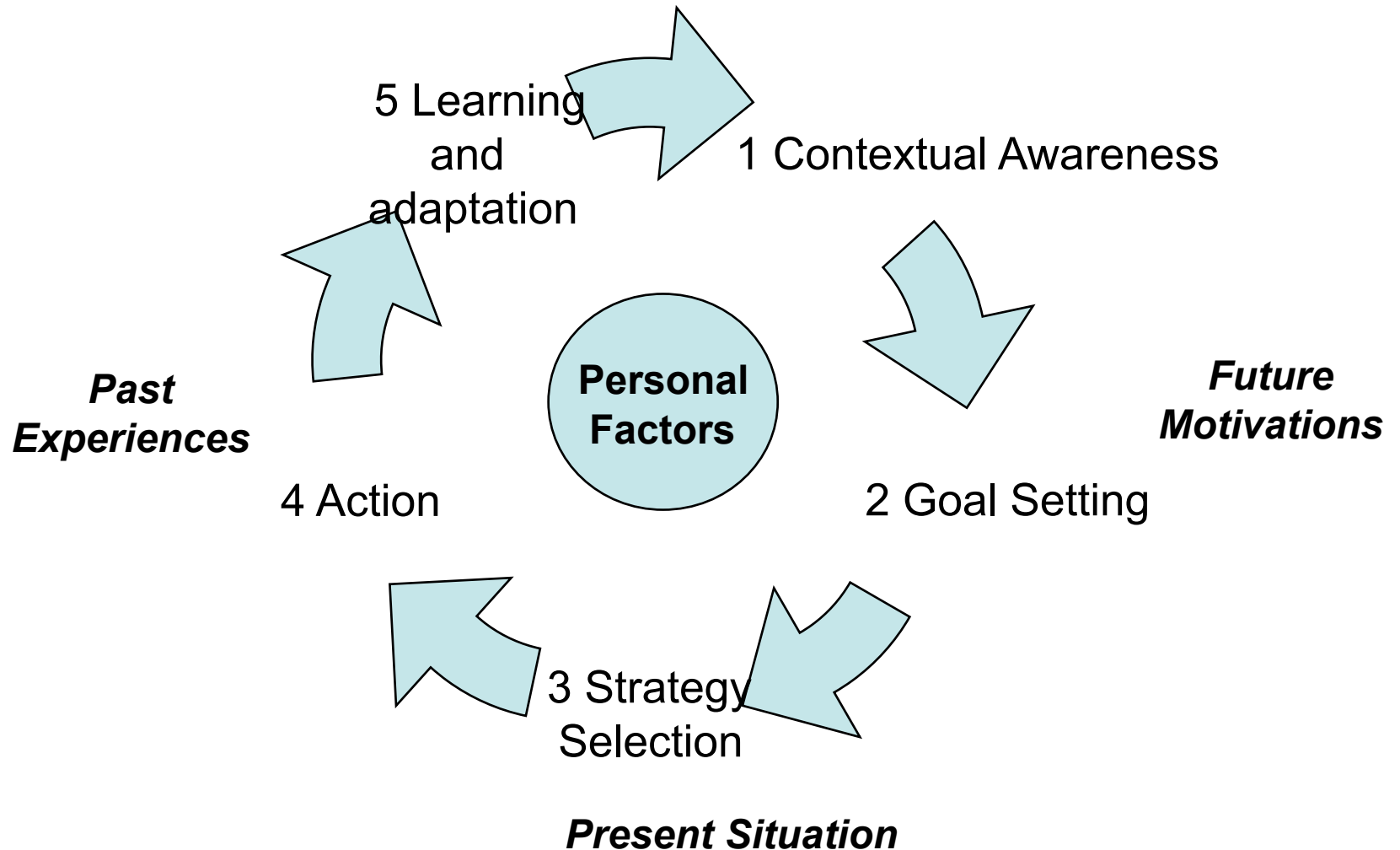
PERSONAL FACTORS

What is the 'personal swim'
students are in?

Four factors have been found to affect self-regulation & influence level of task engagement & persistence:

- Beliefs about learning & knowledge influence learning strategies
- Academic efficacy or expectations about successful task accomplishment
- Level of achievement motivation
- Help-seeking behaviour

The Self-Regulation Cycle



Self-Regulating assessment performance: The basic action cycle

1. Contextual awareness - understanding demands & constraints of the assessment task
2. Goal setting – prioritising what has to be done at what personal standard
3. Strategy selection – organising time & choosing appropriate study strategies for the task
4. Action – managing distractions, avoidances etc. in a timely way to produce a quality product
5. Learning & adaption – reflecting on outcomes & feedback

SELF-REGULATION ACTION CYCLE & ASSESSMENT

- Therefore, failure on assessment can be understood as a **failure of academic self-regulation** or a breakdown at one or more stages of the above action cycle

ACADEMIC RECOVERY & SELF-REGULATION

- From this perspective ‘academic recovery’ requires the student to become somewhat meta-cognitive about ‘what happened’ and ‘what should be done differently’ to ensure better future outcomes.
- While many students are able to evidence this process of reflection on and learning from experience (viz., thinking about their thinking), those most at-risk may be least able to do this.
- The emotional consequences of failure & the competing and complex demands of a new environment may combine to inhibit problem solving and help-seeking behaviour

WORKBOOK DESIGN

The Workbook is designed to

- Follow the logic of self-regulation (viz., the 'medium is the message')
- Prime the advising interview

The process is generically applicable to:

- Any disciplinary context
- Any student cohort
- A wide range of types of assessment

WORKBOOK STRUCTURE

1. **My foundation:** How do I get off to a good start? Student's readiness to engage in problem solving
2. **My assessment:** What is my current situation?
3. **My understanding:** What do I think is going on?
4. **My study profile:** What do I think is going on?
5. **Reflecting on written feedback:** What did staff tell me about my work?
6. **Future performances:** What am I expecting?
7. **Goal setting:** What is the best way forward?
8. **Action planning:** How do I put my goals into action?
9. **Closure & review:** How useful was this exercise?

Facilitating self-understanding of assessment performance: The domains of potential influence

Step 3 – My understanding: What do I think is going on?

- **Academic confidence:** Do I think I can do this?
- **Academic motivation:** Do I want to do this?
- **Beliefs about Learning:** How do I approach learning?
- **Awareness:** Do I know what is expected?
- **Commitment:** Do I set myself study goals?
- **Study Strategies:** Do I study effectively?
- **Actions:** Do I put my plans into action?
- **Help-seeking:** Can I get the help I need to succeed?
- **Present Circumstances:** What is happening in my life?
- **Sense of University:** What's it like for me here?
- **History:** Where have I come from?
- **Future:** Where am I headed?

INTERVENTION TARGET

FY students determined to be at-risk

- All first year students who fail or 'just pass' their first piece of assessment in the threshold course for semesters 1 and 2
- Band of 0 – 60 mark

INTERVENTION COMPONENTS

1. Students are contacted by tutors via, email & phone, and invited to participate in the process.
2. Students complete a reflective workbook structured around a problem-solving cycle (viz., facilitating readiness, self-assessment of performance gaps, clarification of efficacy expectations, goal setting and action planning) designed to help them understand the reasons for their performance on early assessment and identify improvement goals and strategies.

INTERVENTION COMPONENTS

3. Students then meet with a tutor and participate in a guided discussion based on the workbook which concludes with action planning and where appropriate, linkage/referral to university resources.
4. Tutor and student 'stay in contact' (e.g., pre-arranged phone or email contact) to maintain positive momentum.

EVALUATION

- Students complete an evaluation survey containing both rating scales (1-7) and open-ended questions focused on their **experiences** of the process and **outcomes** of the intervention.
- The subsequent **academic performance** of students who undertook the intervention (n = 30) was compared to students of similar achievement in the same courses who did not participate in the intervention (n = 45).
- Students' responses to the workbook were analysed for key **themes** related to their understanding of their underperformance.

OUTCOMES: Academic Persistence

- **Improved student persistence:**
90% of students who participated in the intervention submitted their second piece of assessment compared to a base submission rate of 78% of comparable students who did not participate in the intervention

OUTCOMES: Academic SUCCESS

- **Improved academic success**

100% of students who participated passed their next piece of assessment compared to a base pass rate of 77% of students of comparable academic standard who did not participate in the intervention

OUTCOMES: Passing the course

- **Improved overall academic success**

60% of students who participated in the intervention passed the course compared to only 24% in the non-intervention comparison group.

OUTCOMES: Student Evaluations

At-risk students' self-reported evaluations of the process and outcomes of the intervention were **uniformly positive**.

Students rated the intervention as producing high levels of :

- academic related learning (mean = 5.7/7, sd = .68) and
- personal development (mean = 5.02, sd = .62).

OUTCOMES: Student Process Evaluations

Specific improvements were reported in terms of:

- Greater **insight** into the reasons for under-performance on assessment (mean = 5.56, sd. = .59)
- Increased **efficacy** and **optimism** for future performance (mean = 5.57, sd. .68)
- Given their superior comparative performance reported above, it would seem that students' enhanced sense of efficacy was well-founded.

OUTCOMES: Student Process Evaluations

Importantly, given their at-risk status students also reported the process itself as **non-aversive** (mean = 5.31, sd = .74).

OUTCOMES: Tutor Evaluations

As a result of the intervention tutors reported:

- A stronger relationship with students
- Higher attendance by those students at tutorials
- Greater student engagement

STUDENT EVALUATIONS - Mechanisms contributing to enhanced performance and efficacy

The FAFF intervention clearly functions at socio-emotional, task specific and general self-regulatory levels. Students described -

- The positive value of feeling normalised (*I thought it was only me*);
- Experiencing positive regard and support (*The experience of somebody caring helped me to feel better about myself*);
- Cueing help-seeking (*I wouldn't have done anything if you hadn't reached out*); and
- The value of problem solving and goal setting (*I needed this structure*).

STUDENT EVALUATIONS: Ongoing Challenges

The high ratings for :

- fixed-ability related concerns (*I'm not smart enough*) in students' explanations of their under-performance (fail or near fail) on the first piece of assessment
- compared to effort and organisation related concerns (*I didn't work hard enough*)
- also indicate the fundamental challenge in facilitating movement from an **ego to a learning orientation** (Kluger & DeNisi, 1996).

STUDENT EVALUATIONS: Meta-themes

Consistent with this, two **meta-themes** were apparent from student feedback about the efficacy of the intervention:

1. an improved capacity to clearly **appraise** their academic performance; and
2. a shift from an anxiety-based orientation to a **problem-solving task orientation**.

NEXT STEPS

- 2008 - Currently implementing the FAFF intervention across Griffith Health Group (Griffith L&T Grant)
- 2009 - Will be testing the efficacy and generalisability of the FAFF Workbook intervention across other disciplines (business & law) in another university (Newcastle) funded by an ALTC Priority Grant.

2009-2010: From Early Intervention to Prevention

- Developing & testing a **First-Assessment First-Success Workbook** to provide all commencing students with a structured process to help them orient, engage and prepare for their early/ first assessment tasks.
- The workbook process will firstly raise students' metacognitive awareness of the salient personal (e.g., study strategies and attitudes, motivations, help-seeking behaviour, etc.) and environmental (e.g., staff expectations, task demands, etc.) factors likely to impact on their engagement and success with their first assessment task.
- Students will then work through the self-regulation cycle (viz., awareness, goals, strategies, action) to develop a considered **first assessment management plan**.