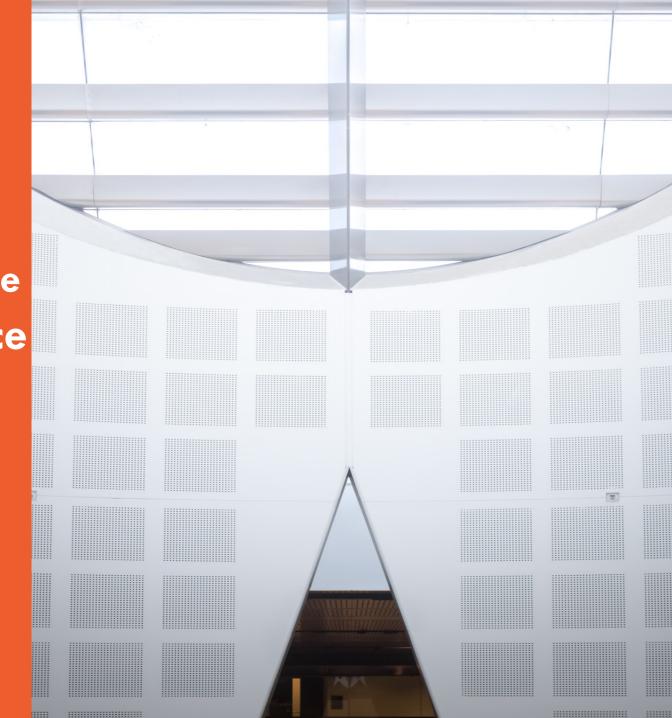
**ATINER conference, Athens 2020** 

Learning on the job:
Challenges in producing an online
HDR writing development resource

**Presenter: Dr Dorothy Economou** 

Academic Enrichment Learning Centre





# **Outline**

## **Background**

The HDR online thesis writing project

# Story of a rocky relationship



# **Challenges**

## **Lessons Learnt**

theory - practice — the literature

## Conclusion





## The HDR project

**Aim**: to research, design and produce a pedagogically sound online academic literacy and learning (ALL) resource

2015-16 with Dr Bronwyn James

Needs Analysis Interviews + thesis writing samples
10 HDR students (Med Fac)
10 HDR Supervisors

Online production

2019 Canvas - new Uni LMS2018 Blackboard - old Uni LMSearly 2017 Bespoke website

Pedagogic objectives & Text analysis

2016 -18 w.Dr E. Szenes, Dr J. Martin model theses, student drafts supervisor comments

Online Learning Design

2017 with R. Denham Educational Designer 2019 with Dr Alex Garcia

# 2. Story of a rocky relationship Phase 1: Hopes and Dreams



# Informing the tool: Needs Analysis interviews

# **Key findings**

# Issues and problems - feedback

- 1. More correcting than developing
- no one wants this

NOT ENOUGH TIME

- 2. Face-face best developmentally
- all say not enough of this
- 3. Three essential elements (all 3 rare)
  - 1. where problem is
  - 2. what problem is

3. how to fix it

NOT ENOUGH KNOWLEDGE

# Successful strategies - feedforward

- Using exemplar texts before writing all good writers said they did this
- 2. Outline each stage of text for feedback before not after they write a full draft
- 3. Explicit targeted instruction all students want more before writing

(but supervisors not confident)

# Aim: Thesis Writing Tool for students and supervisors

### **Students** can use the tool to:

- 1. prepare a draft before sending to supervisor
- 2. understand and use supervisor's comments better

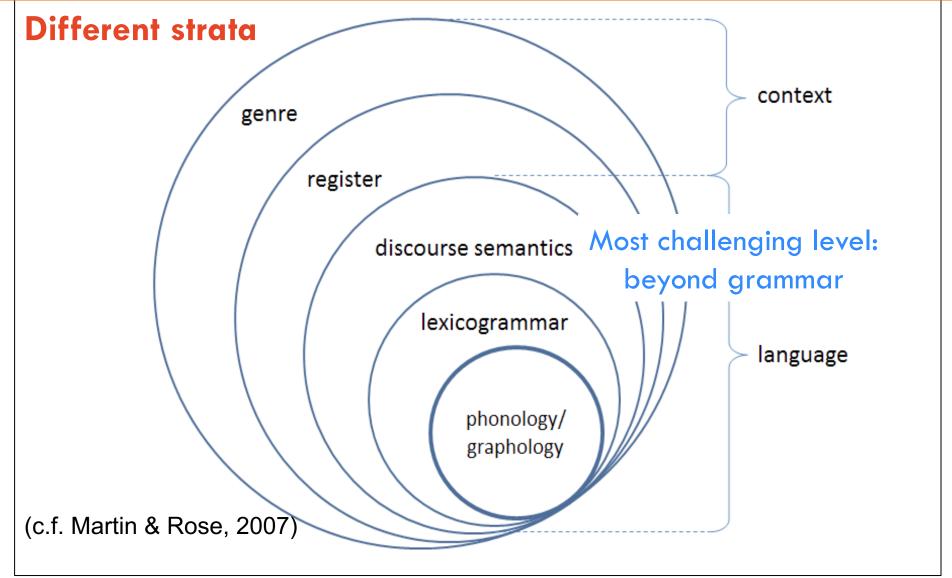
## Supervisors can use the tool to:

- 1. more clearly identify the aspect of student's writing to be worked on
- 3. provide more developmental feedback
- 2. be guided by examples of model supervisor comment on that aspect

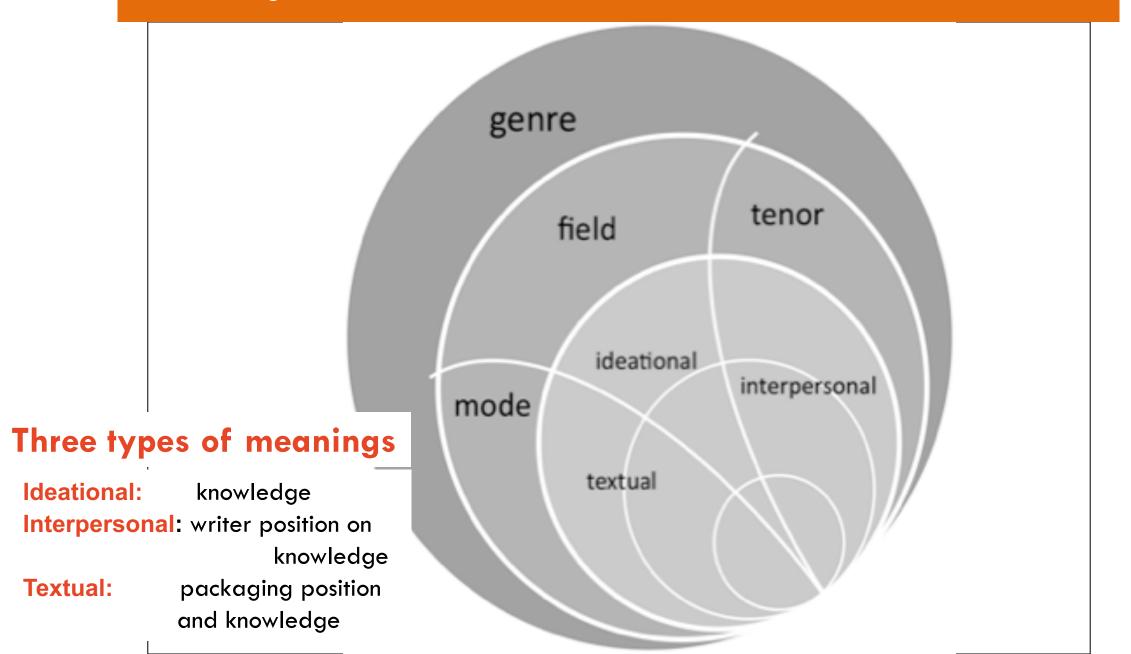
Tool can save time and increase knowledge

Tool can provide a framework and metalanguage to talk about students' writing

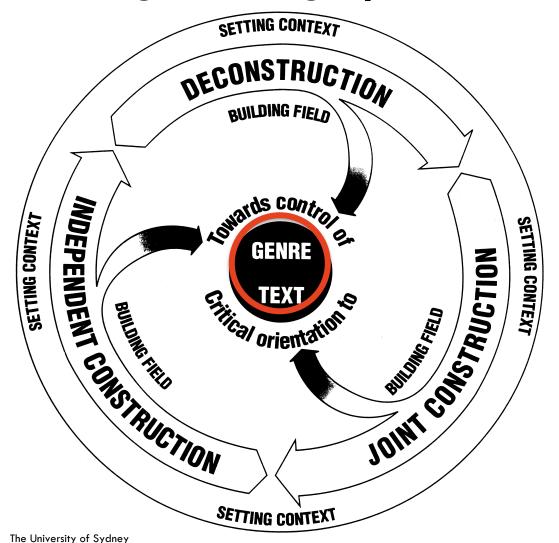
# Informing the tool: Systemic Functional Linguistics (SFL) description



# Informing the tool: SFL description



# **Teaching-Learning Cycle (TLC)**



(from Rothery and Stenglin 1994: 8)

Prep: Setting up social context of the genre All stages: Building field-knowledge

- 1. Deconstruction: modelling and providing explicit knowledge about genre, text structure and language
- 2. Joint Construction: shared genre/text construction through metalanguage learnt during deconstruction (teacher guidance, increasing student control; collaborative peer writing practice feedback)
- 3. Independent Construction: taking control of own writing, increasing potential to critique genres (Drury & Mort 2015, Martin 2000)c

# The story of a rocky relationship Phase 2: The wedding and the honeymoon



ALL

Academic Language and Literacy lecturer

8

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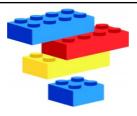
Educational Designer

A bespoke website

# Menu and frame requested by ED

## Research Thesis Writing Tool: main menu (+ pop ups)

#### A. STRUCTURE



Basic building blocks - organising/staging text to fulfil purpose

**B. FLOW** 



Ties, links and threads - creating clear connections across text

C. WORDS



Pearls - selecting the right words for the research context

D. GRAMMAR



Arranging and setting the pearls - in functional sentences

## Thesis Writing Tool: Flow sub-menu + introduction

| A. STRUCTURE         | FLOW: GENERAL INTRODUCTION   |  |  |  |  |
|----------------------|--|--|--|--|--|
|                      | If there is no flow in a text, your readers may comment:   |  |  |  |  |
| B. FLOW              | I can't see a logical connection here.   |  |  |  |  |
| Word chains          | This sentence is back to front. I can't follow this  |  |  |  |  |
| Logical relations    | What does this refer to?   |  |  |  |  |
| Information ordering | <ul> <li>FLOW makes it easy for readers to follow your ideas and complex, technical information in a paragraph or section.</li> <li>(FIRST organise your ideas well. See A. STRUCTURE)</li> </ul>                      |  |  |  |  |
| C. WORDS  D. GRAMMAR | <ul> <li>FLOW is created by making different kinds of meaning links between words/ideas across paragraphs and sections.</li> <li>(AFTER FLOW created, organise and check word in sentences. See D. GRAMMAR)</li> </ul> |  |  |  |  |
| dney                 | FLOW menu items are four strategies for creating the different kinds of meaning links across sentences.  |  |  |  |  |

## Rsearch Writing Tool: 'Information Ordering' introduction + links

| A.STRUCTURE          | INFORMATION ORDERING: INTRODUCTION 1.  |                       |
|----------------------|--|-----------------------|
|                      | What you put <i>in the beginning</i> tells readers the topic of following text - what they will find out more about later.  ** thematic or topic information usually comes first                           | MODEL<br>Examples     |
| B. FLOW              | *in first paragraph of section (Introduction to section)  * in first sentence/s of paragraph (Topic sentence of paragraph)   |                       |
| Information ordering | Remember: 'introduce first'  | STUDENT<br>Drafts     |
|                      | TWO TIPS   |                       |
| C. WORDS             | 1. Old before new: In topic or theme, include some 'given' or 'old' information (that readers already know from previous text or field knowledge). This prepares readers for new information that follows. |                       |
| D.GRAMMAR            | 2. General before specific: The topic or theme is often more general information outlining the topic. This prepares readers for the often more specific, new   | LEARNING<br>Resources |
| D.OKAMMAK            | information that follows.  |                       |

## Research Writing Tool: 'Information Ordering' - Student Draft Link

| A.<br>STRUCTURE | From a student thesis on Weight Loss (Link)  1. Literature review  1.1 Introduction   | STUDENT<br>Draft 2.  |  |  |  |  |
|-----------------|---|--|--|--|--|--|
| B. FLOW         | 1.2 Exercise  1.3 Appetite  The mechanisms responsible for exercise-related clause and appearance increases burger and  | e and <b>Exa</b> l   | DEL<br>mple                                      |  |  |  |
| Information     | why certain types of exercise increases hunger and will be discussed later in section 4, are not yet well used to the control of the control | tite control   |  |  |  |  |
| ordering        | Supervisor: Remember to 'introduce firs' sentence or two here that links previous   |  |  |  |  |  |
| C. WORDS        | With your current section on appetite. Otherwise your discussion on appetite just seems to fall out of the sky, from nowhere.  You could say something like:  |  |  |  |  |  |
| D.<br>GRAMMAR   | "Exercise, especially when combined with viety of health benefits. However, exercise is with weightloss, and this has been reported in the next sections, I will cover what is known exercise on appetite control. But first, I will ocrine control of appetite, as this is relevant  | s not always as<br>d as due to T<br>ow about the ef<br>cover normal, | ssociated<br>Therefore,<br>fects of<br>neuroend- |  |  |  |

# Tool framed according to Teaching-Learning Cycle (TLC) steps

- deconstruction implicit knowledge via tool design, navigation
  - explicit knowledge via information in modules

via annotations on model thesis excerpts

joint construction (modelled) via sample supervisor comments on student drafts

(face-face) via blending with supervision and ALL consults

individual construction via drafts submitted to supervisor

# The story of a rocky relationship Phase 3: Insurmountable obstacles



# Collaboration with Ed Designer constrained:

- not enough time for us to build shared understandings

# The institution ends our partnership

- no bespoke website, must use LMS
- no support for blending tool with supervision

# **University LMS**



# Modular course of short video lessons



From TechSmith, successfully tested in tertiary institutions (Suhr, 2006; Blevis & Elton, 2009)

Can highlight text, zoom in, annotate screen

# Phase 4: Going it alone

First steps: producing ppt slides, scripts and student tasks

Technological Challenge 1: Teach thesis writing in 10-min videos

Six modules comprising 14 video lessons between 5-15 minutes long

Introductory Module University requirements

Writing Modules

Front matter
Introduction Chapter
Literature Review section
Structuring Paragraphs
Creating Flow
(words and grammar)

# Phase 4: Going it alone: Steep learning curve!

# **Technological challenges**

- \*Marrying video medium with pedagogy
- 1. How teach thesis writing in 10 min videos
- 2. How to design and write for screens



This Photo by Unknown Author is licensed under CC BY-SA-NC

# Phase 4 cont. Steep learning curve

- 2. Writing for the screen is hard!
- \* Layout, readability, aesthetics, accessibility

What colours, font types and sizes?
How much text on one screen?
How many, what type of images, diagrams?

- \* Engagement, interest How to keep them online?
- \* Interaction What should they be doing?



www.shutterstock.com • 549688351

MY BIG MISTAKE! Got feedback after content for 10 videos completed!

Rewrote all 10 videos and scripts...

# Phase 4: Going it alone

# Technological challenges

\*Learning new technical skills on the job 3.

4.

5.



This Photo by Unknown Author is licensed under CC BY-NC-ND

# 3. Record animated ppt slides in Camtasia

# Instructions for recording yideo

(slides & narration)

**Print out** script and read aloud – **revise** if necessary and **reprint** 

- 1. Open mp4 file with recorded script on iPhone
- 2. Go to Camtasia

**Open** ppt **Choose** Imac

Press **Record** on screen + Press **Play** on phone recording

**Press arrow on keyboard** to animate and move to next slide

**Pause** recording if needed,

N.B. No need to pause slides, they won't proceed until you select arrow

# Continuous Video Recording In **Progress**

## **GET NEWER INSTRUCTIONS**

# Alternative instructions for recording video slides (NEW)

**Go** to Camtasia - File

**Open** ppt

**Insert** Mp3 audio file into ppt (see instructions above)

Choose Imac

Press **Record** on screen + <u>Press Play</u> on phone recording (NO MORE)

Press arrow on keyboard to animate and move to next slide

The University of Sydney Pause recording if needed (NO MORE)

# 4. Record script narration

### Instructions

#### TO RECORD narration

**Open Camtasia** 

Open File

Choose New Project Choose Voice Narration Choose Imac and Microphone

#### **Press RECORD**

**TO EDIT recording** ( cut, redo and paste)

**Select the spot** (yellow line on minute + second)

Go to **Edit** 

Choose **Split** (won't let you if you haven't selected the start of the bit you want to edit)

Need to select beginning of bit & choose Split-then select end of bit & choose Split again

Delete old bit

Record new bit if want to replace deleted bit (not just get rid of it)

Move new recorded bit up to add to the main recording

### **TO SAVE recording**

At the end of narration Go to **Share** Choose **New project** Choose **Local File** Export MP4 (.mp4) + Name it + Choose where to Save (desktop/ file)



This Photo by Unknown Author

# 5. Export and synch narration recording to video

### **Instructions**

To move saved file from desktop to Icloud Drive

Copy (press Command+?) Go to ICloud Drive Options Desktop and Folders
Then find on iPhone

**NEW Download 'Switch'** – free application for converting Mp4 video file into Mp3 audio file only..

(CHECK do we need to do our script recording in this?)

### Drag the Mp4 file into Switch

Select 'Convert'

Drag it onto desktop

Open video slides ppt.

Select Insert

Audio

Audio from file

Select the Mp3 file from Desktop

Find file in Animations of the first slide—\*\* place it first!

\*\*Make sure the **Speaker is on high** in the inserted recording bar



**AND AFTER ALL THIS?** 

# The story of a rocky relationship

PHASE 5: Older and wiser?

**SOME LESSONS LEARNT** 

theory practice the literature



# Learning resource development underpinned by strong theory

e.g. SFL theory and pedagogical model, the TLC

# Online resource development guided by the relevant literature

e.g. Good Learning Design Propositions in Higher Education

(Ellis & Goodyear, 2010 p.23-4)

e.g. Learning Design Taxonomy

(Nguyen, Rienties & Toetenel, 2017)

## Good Learning Propositions in HE (Adapted from Ellis & Goodyear, 2010 p.23-4)

- 1. Extensive beyond tertiary education to life
- 2. Within a community of practice.

collaborate with faculty

- 3. Induction into a community of practice
- 4. Situated in a context but eventually able to be abstracted
- 5. Through engagement & practice (repetition, feedback, refinement, automation)
- 6. Through challenges met via scaffolding provided by expert others
- 7. Through a progression of challenges
- 8. Through conversation and interaction
- 9. Through effective self reflection
- 10. Not limited by fixed abilities (IQ)
- 11. Motivated (not just by teaching but good curriculum design).
- 12. Supported by different kinds of teaching (direct; scaffolded)





Good Learning Design Table 1: Learning design taxonomy Adapted from Nguyen, Rienties & Toetenel, 2017

|                                   |   | Type of Activity   | Example  |   |
|-----------------------------------|---|--|--|---|
| TLC Deconstruct -ion              | Assimilative Finding and handling information | Attending to information Searching for and processing information  | Read, Watch, Listen,<br>Think about, Access.<br>List, Analyse, Collate,<br>Plot, Find, Discover,<br>Access, Use, Gather. | online modules;<br>annotated pdfs   |
| Simult. Joint construction        | Ton   | Discussing module<br>related content with at<br>least one other person<br>(student or tutor)                             | Communicate, Debate,<br>Discuss, Argue, Share,<br>Report, Collaborate,<br>Present, Describe.                             | discuss/reconstruct<br>draft with supervisor<br>and ALL advisor                 |
| Individual construction           | Experiential                                  | Actively constructing<br>an artefact  Applying learning in a<br>real-world setting                                       | Create, Build, Make, Design, Construct, Contribute, Complete,. Practice, Apply, Mimic, Experience, Explore,              | <ul><li>produce final thesis</li><li>write final draft for supervisor</li></ul> |
| <b>Delayed</b> Joint Construction | Interactive<br>/adaptive                      | Applying learning in a simulated setting   | Investigate,. Explore, Experiment, Trial, Improve, Model, Simulate.  | - <b>online tasks</b><br>- re/write drafts                                      |
| The University of Syd             | Assessment Source:                            | All forms of assessment (summarive, formative and self assessment) Retrieved from Rienties and self assessment (service) | Write, Present, Report, Demonstrate, Critique.  and Toetenel [45]  | -supervisor feedback Page 28  |

# **Evaluating types of learning activity**

(Nguyen, Rienties & Toetenel, 2017)

\* Communication and interactive activities have positive effect on online engagement

\* Productive and experiential activities are **associated with lower level** online engagement

# Criteria to guide online resource development (Blass & Davis, 2003 p.232)) e-learning development

**Guiding principles** 

Higher order criteria

Central concerns

1. Appropriateness of staff and content

**Appropriateness** 

e-learning appropriate, sustainable?

2. Appropriateness for market and students

- 3. Learning aspirations
- 4. Cognitive ergonomics
- 5. Faculty-student interaction
- 6. Student-student interaction
- 7. Reinforcement strategy
- 8. Achievement of purpose

Design

What is the target population? hat should the e-learning look, feel like?

Interaction

How will students and faculty interact?

**Evaluation** 

How are student learning and product effectiveness assessed?

Adapted from TABLE II. Guiding principles and higher order criteria for e-learning development

# e-learning development

(Blass, E. & Davis, A. 2003 p.232)

# **Higher order criteria**

Guiding principles

Central concerns

Is the <u>technical environment</u> sufficient; robust?



Do staff have <u>time</u>, <u>technical skills</u> to develop resources?

# How do we become digitally capable?

'Going Digital' by Garcia, 2018 in JALL Vol1 2, No. 1, 2018, A115-A127

'Going Digital' (Garcia, 2018)

# **Training**

- provided by developers
- via autonomous learning blogs and vlogs
- networking via electronic fora and lists
- peer collaboration (development team)
- peer apprenticing surveys show it is best



Early student trialling via 'User Experience' testing

# Software - another challenge

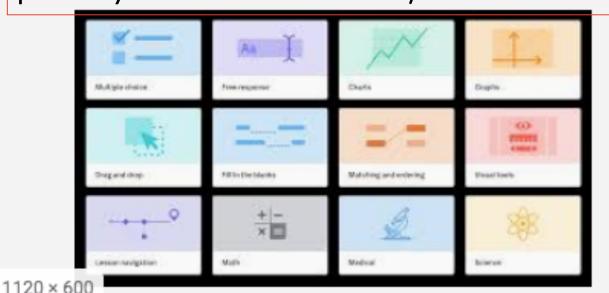


\*BUT not easy to use

\*AND soon to become defunct

\*wide range of activities 'Drag and Drop',
'List sorting', 'Text highlighting' 'Matching' increase engagement; facilitate learning
'by doing'

\*allows high quality feedback (can say why answer correct or not; lead students on different pathways or scaffold next task).



# Conclusion

How to happily marry technology & sound pedagogy

\*\*Ensure high level institutional support for:

- i. collaboration (ALL discipline technology)
- ii. **dedicated time** to share understandings, knowledge and learn some skills
- iii. blending online with face-face (include f-f online)

\*\* while technology is unstable, pedagogically limited

More on why this support becoming harder to get:

Ellis, B. & Goodyear, P. 2019 The Education Ecology of Universities

The University of Sydney

Routledge: U.K.





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Learning on the job: Challenges in producing an online HDR writing development resource

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Academic Enrichment Learning Centre





## CODA

**Digital capability** technical skills to use ever-increasing learning technologies IS NOT ENOUGH

WE ALSO NEED

**Digital fluency** pedagogical skills to design in, and facilitate effective technology-mediated learning

'space to reflect on pedagogic values'
'to experiment, evaluate and learn from trial & error"

(Walker, R., Jenkins, M. and Voce, J., 2018)