

# Research Skill Development in the MBA Capstone Project: Tools for Facilitating Student Engagement

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#### Abstract

The paper presents the preliminary findings of an ongoing research project which follows up with MBA students on the introduction of the Research Skill Development (RSD) framework. It considers the RSD as a basis for explaining to these students how their studies were enabling them to meet the AQF 9 requirements for a research (capstone) experience in the masters coursework degree. It is based on working papers presented at two professional association meetings pertaining to the use of Goal Attainment Scaling (GAS) as a student engagement tool in learning, teaching and evaluation (Sharp, 2016a; 2016b).

Evidence is presented concerning the efficacy of two tools of engagement: GAS can be used in facilitating evaluation of effectiveness of student engagement in students' own goal setting and measurement of the learning outcomes (Sharp, 2014) in research skill development (Willison & O'Regan, 2007) for their Masters Coursework capstone project development. Also, based on these data and anecdotal consultation with MBA students, an adaptation of Willison's RSD pentagon can be used to facilitate student engagement in strategic thinking.

#### Introduction

"There is... no point in the philosophy of progressive education which is sounder than its emphasis upon the importance of the participation of the learner in the formation of the purposes which direct his activities in the learning process, just as there is no defect in traditional education greater than its failure to secure the active co-operation of the pupil in construction of the purposes involved in his studying" (John Dewey, 1938, p. 116).



A high profile and expensive degree, the Master of Business Administration (MBA) was subjected to the tightening of the Australian Qualification Framework (AQF) in 2015, requiring a 'capstone research experience'. MBA students were often concerned about the relevance of the AQF 9 requirements for conducting research in the masters coursework degree. Universities and Business Schools have a requirement to review the content and consistency of degree programs, especially the coherence of course objectives, assessment and program objectives, which has led to accreditation processes around "Assurance of Learning". Most of what is provided as an assurance of learning is academically driven and based on models of learning from the past. There are echoes of Dewey's concern about the participation of students in setting such research and whether there is an engagement of students in understanding the relevance of the research skills they are expected to develop.

This paper summarises research conducted on the learning outcomes of MBA students and follows the Models of Engaged Learning & Teaching (MELT) approach of adapting the RSD pentagon to assist MBA students in their strategic thinking. Here, preliminary findings are presented from an ongoing research project investigating the introduction of the RSD framework (Willison & O'Regan, 2007) into the MBA capstone project<sup>1</sup>. This work shows a way of using the RSD framework and online learning technology to offer more student engagement in developing research skills and measuring the outcomes of MBA student learning research capstone projects. It outlines an ongoing study of MBA students' goal setting about their capstone strategy project, which entails using individualised goal attainment scaling (GAS) along with their e-portfolio as tools for facilitating flexibility of goal setting and associated learning outcomes and as a follow-up measure for their self-monitoring of their performance in terms of their career, workplace and personal goals in anticipating change.

Evidence is presented concerning the efficacy of two tools of engagement: GAS can be used in facilitating evaluation of effectiveness of student engagement in their own goal setting and measurement of learning outcomes (Sharp, 2014) in research skill development (Willison & O'Regan, 2007) for their Masters Coursework capstone project development. Also, based on these data and anecdotal consultation with MBA students, an adaptation of the RSD pentagon can be used to facilitate student engagement in strategic thinking.

<sup>&</sup>lt;sup>1</sup> The present paper is based on working papers presented at two professional association meetings pertaining to the use of Goal Attainment Scaling (GAS) as a student engagement tool in learning, teaching and evaluation (Sharp, 2016a; 2016b).

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#### **Goal Attainment Scaling**

Kiresuk, Smith & Cardillo (1994) have demonstrated that the Goal Attainment Scaling (GAS) method is as valid and reliable as many other forms of quantitative scaling techniques. Participants set their own potential goal outcomes statements and arrange them into at least five levels matching a range of +2 to -2 scores on the GAS follow-up guide. GAS has been applied in many areas of the design, planning and evaluation of organisational programs, especially where the focus of the measurement and evaluation is on individuals' outcomes (e.g. Andrews, Dunn, Hagger, Sharp, & Witham, 1995; Australian Youth Foundation & Sharp, 1996; Sharp, 2014).

The international AHELO (2013) project and the OLT (Barrie et al., 2012) have funded extensive studies of how to measure (and assure) graduate learning outcomes. However, few studies have researched engagement with students in facilitating and assessing their own learning goals with GAS. Recent studies have reported 'problems' in engaging graduates in 'co-creating' curriculum and/or identifying learning outcomes (Allin, 2014; Edwards et al., 2015). Few studies have adapted e-portfolios for life-long learning for students and even fewer have used e-portfolios as a register for students' goal statements about their learning outcomes (e.g. Heinrich et al., 2007).

Table 1 shows an example of how GAS has been applied by Sharp with the various MBA students.



 TABLE 1: Example: Goal 2 = To apply RSD /evidence-based decision making in reviewing strategic issues

 within 12 months (by Oct 2016)

Level of Expected	Rating	Behavioural Statement of
OUTCOME		EXPECTED OUTCOMES: GOAL 2
MUCH MORE than EXPECTED	+2	Apply RSD level 5: Open Collect and record self-determined information/data from self-selected sources, choosing or devising an
		appropriate methodology with self-structured guidelines. Evaluate
		information/data and inquiry process rigorously using self-generated criteria
		based on experience, expertise and the literature. Reflect insightfully to renew others' processes.
MORE than EXPECTED	+1	<b>Apply RSD level 4: Self-initiated</b> data collection and research/problem solving choosing appropriate self-determined criteria developed within structured guidelines. Evaluate information/data and the inquiry process comprehensively using self-determined criteria developed within structured guidelines. Reflect insightfully to refine others' processes (e.g., re-develop a previously structured research proposal for trial of new initiative with your own adaptation of criteria and methods and conduct the research/data collection).
EXPECTED Outcome	0	<b>Apply RSD level 3: Scaffolds</b> placed by top management shape data collection and research/problem solving with criteria related to the aims of the inquiry. Reflect insightfully to improve own processes used (e.g., Organise information/data using recommended structures. Manage self-determined processes with multiple possible pathways).
LESS than EXPECTED	-1	<b>Apply RSD level 2: Bounded Research</b> with criteria given by top management (e.g., collect and record required information/data using a prescribed methodology from prescribed source/s in which the information/ data are not clearly evident).
MUCH <i>LESS</i> Than EXPECTED	-2	<b>Apply RSD Level 1: Prescribed Research</b> with simple prescribed criteria given by top management (e.g., collect and record required information or data using a prescribed methodology from a prescribed source in which the information/data are clearly evident).

# **Outline of Method:**

#### 1. Skills Development

As part of their masters coursework, UniSA MBA students had introductory workshops on research methods to prepare for a capstone project. The present author was the presenter of those workshops using the RSD framework and tools to facilitate the students' management and self-evaluation of their capstone project and enhance their work-integrated learning outcomes.



#### 2. Data Collection

This paper reports on the data collection following three capstone and three pre-capstone courses for which the present author was presenter. Students were aware of the university's ethics requirements, and their right not to participate as well as the expected involvement if they did (including GAS forms which were explained as a tool for goal setting and evaluation generally). The students read the research proposal and chose whether to sign the consent form given out by a third party who collected these forms. After the course assessments, the students who signed consent were contacted to arrange an interview and to assist them in understanding how they might use the GAS forms in their capstone project and, if possible, 3 to 12 months after their completion of their masters, to compare how they have performed and self-assessed in relation to their goals. A short questionnaire (20 minutes) was emailed to all participating students to request feedback, followed by an interview around those questions about whether (and if so, how) they used the RSD framework and the GAS goal setting.

Students were given GAS examples in class and on paper then asked to *set their own work-integrated learning project goals* and then use the GAS form to rate these statements in a five-point scale individualised rubric which they will use to self-assess their base-line (expected goals), project completion (progress towards WIL goals) and real-world progress towards their work &/or career goals at about 12 months after graduation. Students gave the researcher a copy of these forms which were re-identified (by self-created code) and the anonymous scores aggregated and collated for comparison of progress over the time series.

The point of the research is to understand how to help the students develop their confidence and competence in research skills and self-assessment of their progress towards their course and career related goals. These goals and self-monitoring are not part of the coursework assessment. The researcher seeks their feedback so as to be able to improve the research skill development course and the understanding of whether student self-evaluation using GAS can facilitate their skills development and perception of their career effectiveness.

#### **Preliminary Findings**

At present, of the 69 MBA students who have agreed to participate, 29 are expected to be followed up over the next year to give feedback on their use of the RSD framework and GAS. At this stage, the present paper is only able to report on preliminary findings from several of the students who volunteered their GAS forms



and interviews earlier than the expected follow-up date, i.e., 12 months after the capstone course (see Appendix B for examples of these students' GASs pertaining to the RSD).

#### **Research Skills Framework Transformed into Strategic Thinking Skills**

In using the RSD pentagon to explain research skills to MBA students for their capstone project in strategic management, it emerged that the pentagon could be adapted to facilitate a better integration of research thinking and strategic thinking. The present paper illustrates this adaptation and shares some preliminary anecdotal evidence as to its relevance as a teaching aid.

See Appendix A for an example of the adaptation of the RSD pentagon to assist in strategic thinking skills in the capstone project.

#### Conclusion

Obviously, this is work in progress and too preliminary for substantial conclusions. However, the researcher has been pursuing this work for over three years and is encouraged by the anecdotal data and enthusiasm of the students with whom he has shared this work. Also, this work has been shared with fellow MBA teaching colleagues who agree that this is an encouraging basis for collaboration with students to further the development of their understanding of research and foster beneficial student outcomes from our programs. In this, the RSD has been an important and useful basis for integrating and explaining the research capstone project into the coursework MBA. The adaptation of the RSD pentagon seems to have potential to foster development of strategic thinking as a fundamental skill which can facilitate the usefulness of the capstone project and potentially ongoing learning and application.

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#### References



- AHELO 2013 Measuring learning outcomes in Higher Education: Lessons learnt from the AHELO Feasibility Study and next steps. OECD Conference centre, Paris 11-12 March 2013. <u>http://www.oecd.org/site/ahelo/Agenda%20FS%20Conference.pdf</u>
- Allin, L. 2014. "Collaboration Between Staff and Students in the Scholarship of Teaching and Learning: The Potential and the Problems" *Teaching & Learning Inquiry: The ISSOTL Journal*, Vol. 2, No. 1, pp. 95-102 <u>http://www.jstor.org/stable/pdf/10.2979/teachlearningu.2.1.95.pdf?acceptTC=true</u>
- Australian Youth Foundation & Sharp, C.A. 1996. Do-it-yourself Evaluation Manual: An integrated approach to project management and evaluation. Sydney. Australian Youth Foundation.
- Barrie, S., Hughes, C., Crisp, G. & Bennison, A. 2012 Assessing and assuring Australian graduate learning outcomes: principles and practices within and across disciplines. Final Report Office for Learning and Teaching Project. University of Sydney <u>http://www.sydney.edu.au/itl/projects/aaglo</u>
- Dewey, J. 1938. "Experience and Education" *in Adler, M.J. (Ed) Great Books of the Western World.* Vol 55, Encyclopaedia Britannica, Chicago, pp. 99-125.
- Kiresuk, T. J., A. Smith, & J. E. Cardillo, (eds.) 1994. *Goal Attainment Scaling: Applications, Theory, and Measurement.* Hillsdale, New Jersey: Lawrence Erlbaum.
- Read, P. & Sharp, C. (2011) "Goal Attainment Scaling applied to Early Intervention with visually impaired children at CanDo4Kids" Working Paper, <u>http://papers.ssrn.com/sol3/papers.cfm?abstract\_id=1704244</u>
- Sharp, C. A. 2014 "Measuring outcomes of Action Learning" *BestThinking,* <u>https://www.bestthinking.com/articles/society\_and\_humanities/education/professional\_development/</u> <u>measuring-outcomes-of-action-learning;</u>
- Sharp, C. A. 2014 "Measuring outcomes of Action Learning" *BestThinking,* <u>https://www.bestthinking.com/articles/society\_and\_humanities/education/professional\_development/</u> <u>measuring-outcomes-of-action-learning</u>



- Sharp, C.A. & Read, P. 2011 "Goal Attainment Scaling in early childhood intervention: Implementation and Evaluation" Evaluation Journal of Australasia vol. 11, no. 2, pp. 31-41. <u>http://www.aes.asn.au/images/stories/files/Publications/Vol11No2/4.pdf</u>
- Sharp, C.A. 2016a "Preparing for career change Engaging Graduate Students in WIL outcome self-determination and self-assessment using e-Portfolios for Research Skills Development & Goal Attainment Scaling"
   Graduate Management Association of Australia (GMAA) Paper (12/8/16) at Annual MBA Symposium & Conference, University of Wollongong, Sydney Business School. <u>http://www.gmaa.com.au/colin-sharp/</u>
   <u>https://ssrn.com/abstract=3007017</u>
- Sharp, C.A. 2016b, "Measuring Student Learning Outcomes in Evaluating Assurance of Learning (using Goal Attainment Scaling)" Seminar (17/8/16) Australasian Evaluation Society, South Australian branch at KPMG Adelaide.
- Willison, J. & O'Regan, K. 2007. "Commonly known, commonly not known, totally unknown: a framework for students becoming researchers" *Higher Education Research and Development*, vol. 26 no. 4, pp 393-409.



### **APPENDIX A: STRATEGIC THINKING PENTAGON**



(Dr Sharp's adaptation for STRATEGIC THINKING Pathways to Organisational Improvement)

# APPENDIX B: EXAMPLES OF GASs WRITTEN BY STUDENTS

Here are two examples of GAS forms filled in and emailed by 2016 graduating MBA students referring to their expected capstone outcomes (typos original).

#### Case 1:

#### **Background:**

He is a Design Engineer and Project Manager, in the manufacturing sector for several years with the same laboratory, who has finished his MBA. He initially felt his MBA capstone project was "not likely to get much traction" in his company because his unit is at the functional level in a subsidiary recently taken over by a large conglomerate. But his approach to the top management to interview them about the company's strategic direction for this capstone strategic review report opened doors for him. Indeed this project facilitated his reflection on his skills and he realised that his approach has relevance and he could achieve the goal : "To become more superior to my former self." Also he saw the RSD and the Work Skill Development<sup>2</sup> version as a way of encouraging and mentoring junior engineers in developing their research and consulting skills (see Goal 5).

### STRATEGY PROJECT OUTCOMES

#### What did you expect to ACHIEVE from your PROJECT? (use back of the page if needed)

- Make a positive impact to the company's future success.
- Become networked with executives and senior management of my organization.
- *Open future opportunities for career development in executive management.*
- To become more superior to my former self.

#### How would you ASSESS the benefits (outputs &/or outcomes) from the strategy project 3 to 12 months after you graduate?

In planning for at least one review during the next year, and/or at the end of the strategy planning horizon, what are the goals you have for the project? Use this form to write down your expectations of the outcomes in terms of what benefit you will have achieved months after the end of the project and/or after you graduate.

Then translate those goals into expected outcomes in the table below. For example you could set goals for applying strategic thinking and/or for applying research/problem solving skills and/or career development outcomes.

# PROJECT GOALS (set 13/10/15):

- 1 *MBA Project Outcome By mid 2016, My Company has set a clear purpose, strategy and values that are understood and adopted by all My Company stakeholders, which embody and support this plan.*
- 2 MBA Project Outcome By mid 2016, My Company has developed KPIs and incentive systems that encourage sales in the Projects Market.
- *3 MBA Project Outcome By mid* 2016, *My Company has focused R&D resources to enter the control systems market*.
- 4 To better manage oneself, creating a healthy work life balance.
- 5 To mentor and develop my lead Senior Engineer to Level 5 for Learning & Reflecting and Problem Solving & Critical Thinking under the Work Skill Development<sup>1</sup> framework.

<sup>&</sup>lt;sup>2</sup> WSD = The Work Skill Development version of Wilkinson's Research Skill Development developed by Dr Sue Bandaranaike (James Cook University)

# 6 To make a positive impact in the Senior Leadership Group.

The data is available	on all these	forms. Here onl	y the GAS fo	orms 3, 5 &	6 are j	presented for t	this pa	per.	

Level of Expected	Rating	Behavioural Statement of						
OUTCOME		EXPECTED OUTCOMES:						
		GOAL 3 – R&D / Control Systems Market						
MUCH MORE	+2	Mid 2016, additional resources made available to R&D for the development of Control Systems products. The Control Systems market is						
than		central to the organizational purpose.						
EXPECTED								
MORE than	+1	Mid 2016, R&D resources have been redirected for the development of Control Systems products. The Control Systems market is a strong						
EXPECTED		focus of the organization.						
EXPECTED	0	Mid 2016, R&D have started development of Control Systems product. The Control Systems market is on the organization's agenda.						
Outcome								
LESS than	-1	Mid 2016, R&D have identified feasible product development projects for the Control Systems market.						
EXPECTED								
MUCH	-2	Mid 2016, the Control Systems market is not on the organization's agenda.						
LESS Than								
EXPECTED								

Level of Expected	Rating	Behavioural Statement of
OUTCOME	Kating	EXPECTED OUTCOMES:
OUTCOME		GOAL 5 – Senior Engineer (WSD <sup>3</sup> Mentoring)
MUCH MORE	+2	(WSD Level 5) - Critically evaluates information using self-generated criteria based on experience and expertise to reflect on lifelong
than		learning skills. Applies sophisticated critical thinking and analysis to initiate change and extrapolate outcomes.
EXPECTED		
MORE than	+1	(WSD Level 4) - Uses self-determined criteria to critically evaluate role and fill in gaps to generate lifelong learning skills. Applies critical
EXPECTED		thinking and works collaboratively to synthesise, analyse and produce innovative and creative solutions.
EXPECTED	0	(WSD Level 3) - Critically evaluates the match between theoretical and practical applications to generate knowledge. Works independently
Outcome		to synthesises and analyse a range of resources to generate new knowledge.
LESS than	-1	(WSD Level 2) - Evaluates information /data with some degree of guidance to understand and reflect on role. Applies a structured format to
EXPECTED		synthesise and analyse existing data and knowledge.
MUCH	-2	(WSD Level 1) - Evaluates information /data using simple prescribed criteria to understand and reflect on role. Applies a simple structure to
LESS Than		understand existing data and knowledge.
EXPECTED		
Level of Expected	Rating	Behavioural Statement of
OUTCOME		EXPECTED OUTCOMES:
		GOAL 6 – Impact Senior Leadership Group
MUCH MORE	+2	<b>GOAL 6 – Impact Senior Leadership Group</b> Develop goals inline with the strategises of the business that address key issues, with a supporting recommendation action plan.
MUCH <i>MORE</i> than	+2	
	+2	
than	+2	
than EXPECTED		Develop goals inline with the strategises of the business that address key issues, with a supporting recommendation action plan.
than EXPECTED MORE than		Develop goals inline with the strategises of the business that address key issues, with a supporting recommendation action plan. Participate actively with initiative in the Senior Leadership Group by identifing and raising key issues to the Senior Leadership Group, with
than EXPECTED MORE than EXPECTED	+1	Develop goals inline with the strategises of the business that address key issues, with a supporting recommendation action plan. Participate actively with initiative in the Senior Leadership Group by identifing and raising key issues to the Senior Leadership Group, with supporting recommendations on how to address them.
than EXPECTED MORE than EXPECTED EXPECTED	+1	Develop goals inline with the strategises of the business that address key issues, with a supporting recommendation action plan. Participate actively with initiative in the Senior Leadership Group by identifing and raising key issues to the Senior Leadership Group, with supporting recommendations on how to address them.
than EXPECTED MORE than EXPECTED EXPECTED Outcome	+1 0	Develop goals inline with the strategises of the business that address key issues, with a supporting recommendation action plan. Participate actively with initiative in the Senior Leadership Group by identifing and raising key issues to the Senior Leadership Group, with supporting recommendations on how to address them. Participate actively in the Senior Leadership Group by identifing and raising key issues to the Senior Leadership Group.
than EXPECTED MORE than EXPECTED EXPECTED Outcome LESS than	+1 0	Develop goals inline with the strategises of the business that address key issues, with a supporting recommendation action plan. Participate actively with initiative in the Senior Leadership Group by identifing and raising key issues to the Senior Leadership Group, with supporting recommendations on how to address them. Participate actively in the Senior Leadership Group by identifing and raising key issues to the Senior Leadership Group.
than EXPECTED MORE than EXPECTED EXPECTED Outcome LESS than EXPECTED	+1 0 -1	Develop goals inline with the strategises of the business that address key issues, with a supporting recommendation action plan.         Participate actively with initiative in the Senior Leadership Group by identifing and raising key issues to the Senior Leadership Group, with supporting recommendations on how to address them.         Participate actively in the Senior Leadership Group by identifing and raising key issues to the Senior Leadership Group.         Participate passively in the Senior Leadership Group.

<sup>&</sup>lt;sup>3</sup> WSD = The Work Skill Development version of Wilkinson's Research Skill Development developed by Dr Sue Bandaranaike (James Cook University)

#### **COMMENTS:**

He graduated April 2016 and is due for a followup interview and self assessment reflection. **EXAMPLES OF GAS's WRITTEN BY STUDENTS** Case 2:

**Background:** 

He is a Finance Executive and Change Manager, for several years with the same large company in the banking sector, who has finished his MBA. He initially felt his company's performance metrics were more sophisticated than GAS (but those metrics were "as boring as batshit"). GAS offers his own point of reference rather than the company's standards. His MBA capstone project was expected to not to get much support from his indifferent boss. He said it was a "pity that the MBA didn't have this approach to strategy upfront".

#### He emailed:

My GAS goals "have changed a bit but here is my... draft ... I am already well on my way to achieveing them".

"Originally when we spoke I wanted to prove I can generalise my leadership and between then and now I have done 6 weeks leading {organizational change}.... which has helped to raise my profile. While its only a start is has been enough to register my interest and show the other senior execs I have some capability. ...."

"I feel like I am setting myself up for some success with their support. The mentor has already spoken ... about using my skills elsewhere and {my boss} has agreed."

"The GAS process, which largely in my mind, has been a useful one and writing it down on paper with the variations of what success does or does not look like has been a good way of thinking about measures of success. I look forward to your feedback."

#### How would you ASSESS the outputs and outcomes from the strategy project 3 to 12 months after you graduate?

In planning for at least one review during the next year, and/or at the end of the strategy planning horizon, what are the goals you have for yourself and for the project? Use this form to write down your expectations of the outcomes in terms of what benefit you expect to have achieved months after the end of the project and/or after you graduate. Then translate those goals into expected outcomes in the tables below (see p2 for summary & pp 6 - 8 for detail). For example you could set goals for applying strategic thinking and/or for applying research/problem solving skills and/or career development outcomes (see such examples from page 3).

#### What were your PROJECT GOALS (set 20/10/15):

- Can identify new strategic issues, define the strategic approach and measure successful outcomes. 1
- 2 Can demonstrate how my specialist skill-set has broadened out and I am capable of a more senior generalist role.
- 3 *Can improve my leadership brand with the executive team as a result and secure a new leadership role.*

Level of Expected OUTCOME	Rating	Behavioural Statement of EXPECTED OUTCOMES: GOAL 1
MUCH <i>MORE</i> than EXPECTED	+2	Review report recieved very favourably with all recommendations being implemented and performance is exceeding expectations (e.g., revenue up >5% and better organisation and use of our resources for strategic advantage against the whole market).
MORE than EXPECTED	+1	Review report recieved favourably with most recommendations implemented and some performance improvement (e.g., better organisation of our resources compared to main competitor; some better customer /stakeholder feedback).
EXPECTED Outcome	0	Review report being discussed favourably with at least 1 or 2 recommendations implemented and some indication of potential performance improvement (e.g., prioritised and began re-organising our resources vis-a-vis competitor; data from review are mostly accepted as bases for improvement).
LESS than EXPECTED	-1	Review report being discussed with 1 or 2 recommendations partly accepted for implementation and data from review are being discussed as bases for improvement (e.g., management discussing review recommendations with possible re-organising our resources vis-a-vis competitor).
MUCH LESS Than EXPECTED	-2	Review report not well received and/or Little or no progress on any recommendations and/or data from review are questioned as to whether they are bases for improvement (e.g., no agreement on re-organising our resources vis-a-vis competitor).

# *For Case 2:* Goal 1 = To apply strategic review's recommendations within 12 months (by Oct 2016)

For <i>Example</i> : Goal 2 = To apply RSD /evidence-based decision	on making in reviewing	g strategic issues withi	n 12 months (by Oct 2016)
101 Diminiple: 0001 D = 10 uppi, 10D / 01100100 buseu uccisi		s bei acegie ibbaeb mittin	

Level of Expected	Rating	Behavioural Statement of
OUTCOME		EXPECTED OUTCOMES: GOAL 2
MUCH <i>MORE</i> than EXPECTED	+2	<b>Apply RSD level 5: Open</b> Collect and record self-determined information/data from self-selected sources, choosing or devising an appropriate methodology with self-structured guidelines. Evaluate information/data and inquiry process rigorously using self-generated criteria based on experience, expertise and the literature. Reflect insightfully to renew others' processes.
MORE than EXPECTED	+1	<b>Apply RSD level 4: Self-initiated</b> data collection and research/problem solving chosing appropriate self-determined criteria developed within structured guidelines. Evaluate information/data and the inquiry process comprehensively using self-determined criteria developed within structured guidelines. Reflect insightfully to refine others' processes (e.g., re-develop a previously structured research proposal for trial of new initiative with your own adaptation of criteria and methods and conduct the research/data collection).
EXPECTED Outcome	0	<b>Apply RSD level 3: Scaffolds</b> placed by top management shape data collection and research/problem solving with criteria related to the aims of the inquiry. Reflect insightfully to improve own processes used (e.g., Organise information/data using recommended structures. Manage self-determined processes with multiple possible pathways).
LESS than EXPECTED	-1	Apply RSD level 2: Bounded Research with criteria given by top management (e.g., Collect and record required information/data using a prescribed methodology from prescribed source/s in which the information/ data are not clearly evident).

MUCH LESS Than EXPECTED	-2	Apply RSD Level 1: Prescribed Research with simple prescribed criteria given by top management (e.g., Collect and record required information or data using a prescribed methodology from a prescribed source in which the information/data are clearly evident).
	3 = To ap	ply strategic thinking &/or research skills to improve my career within 12 months (by Oct 2016)
Level of Expected OUTCOME	Rating	Behavioural Statement of EXPECTED OUTCOMES: GOAL 3
MUCH <i>MORE</i> than EXPECTED	+2	By me applying and presenting my strategic review it is recognised by the Board & top management (e.g., promoted to more senior position with more strategic role).
MORE than EXPECTED	+1	By me applying and presenting my strategic review it is recognised by top management (e.g., appointed project leader to implement recommendations).
EXPECTED Outcome	0	By me applying my strategic review it is recognised by my Supervisor {e.g., extra pay increment(s) as reward for my review &/or MBA qualification}.
LESS than EXPECTED	-1	By me attempting to apply my strategic review it is recognised by some of management peers (e.g., summary of my review is published in the staff newsletter).
MUCH LESS Than EXPECTED	-2	By my inability to apply my strategic review there is little or no recognition of my recommendations and no career advancement.

**COMMENTS:** He graduated April 2016 and is due for a followup interview and self assessment reflection.

# OTHER ANECDOTAL DATA Examples of interview data (*italics*) pertaining to the *RSD aspect* of the research

Q1a: Have you used	Q2: Have you been	Q3: Was	Q4: Was capstone	Q5: Have you been	Q6: Have you any	e-Portfolio?
GAS to followup	able to set useful	capstone	project &/or	able to apply the	suggestions for	
capstone goals?	WORK goals?	project & /or	report useful to	RESEARCH SKILLS	improvement to the	
1b: GAS examples?	2a: What was	Report useful	your	FRAMEWORK in your	Goal setting & Self-	
	most useful?	to YOU?	ORGANISATION?	workplace?	Evaluation process?	
		3a: What	4a: what was most	5a: please explain		
		aspect was	useful?	5b: what was most		
		useful?		useful?		
Case 5:						
will use GAS - tried	yes - actually 1st	he didn't	yes it was useful -	some students didn't	Reflective learning	When Dr Sharp
first time to plan -	course CMS class	personally	he is still following	follow the content of	journals should be	introduced e-
used to SMART	2013 in which	need 'visibility'	up with the	the research skills	encouraged but Non-	portfolio it was the
goals in his job (not	students set	such as this	organisation about	workshop & didn't	Graded Pass; make	first he had heard
GAS) in personal	personal goals -	SMM project -	the	bother because it	the e-portfolio	of it. It should be
performance review	but never had	already senior	recommendations-	wasn't assessed;	compulsory early in	compulsory 5% of
- assessed as:	time to followup	exec. But it did	all the	- RSD framework was	MBA - interview new	all course
Above. Met or Not	@ each course -	force him to	stakeholders are	relevant - but it was	candidates - check	assessment - he
met work KPIs/	but will now;	think about	keen on his report	left too late in the	maturity for exec	will copy over &
objectives	law/ethics had a	company	but it is not yet	MBA to do much. We	level prepare them	print off all his
	reflective journal -	strategy more	packaged properly	can do the SMM	for exec level; he will	previous
	yes useful but had	than the	for the Exec/	report without the RSD	use e-portfolio for	assignments for his
	to do these	annual	Board- but don't	skills; but these	own learning records	e-portfolio then
	'credibly from	strategy review	know how that	research skills are	and self-review.	also use it for his
	experience; not	- which doesn't	will 'impact ' -also	transferable even		career plans and
	because they were	go to the	a new project is	though we didn't have		self-reflection; he
	marked, which	depth which	now already	to use them in the		will go back and
	meant they were	the SMM	possible	MBA - he will now in		compare his
	not good enough'	review report		retrospect because		progress against his

		requiredyet; the SMM review was a more balanced approach than they normally do.		sees relevance to further projects at work.	CMS first personal goals - he wants to understand how the MBA enables his goals and progress. his Job already allows work/life balance- but for others it should integrate course around their personal development.
Case 6: Yes used GAS as sort of rapid advancement plan' and he and wife have developed 5 yr plan to go to O/S (from Feb 2017) then return to start up new business as consultant (He'll send GAS forms when updated them)	his capstone report goals aimed at getting his strategy report to the Board but as yet the Board haven't seen his full SMM report; he was focused on a sub-set recommendation \$45 milln construction project – for which he had a risk mitigation plan	Putting a report to the Board has given him the goal to get into the AICD CDC which will guide his career into Board membership in 5 years; his Personal GAS are 'hamstrung' in his current job	He hasn't put the full SMM report to the Board yet but has presented parts; He will in October (He'll follow up with GAS forms then) he has the backing of 2 Non-Exec Directors - especially they support his project metrics; the CEO is a great support but he can't go	He has benefited 'immensely' from the SMM course Strategy Skills; personal research skills were beneficial -he used the RSD framework - he has it on his desk at work - seemed to help with the SMM report - but he needs to re-visit it with this next project - will love to catch up after the October Board report	Yes – but no posts

and Board	- he needs 1	forward with the
presentations	year to get	scope of this
	away to 're-	major project (the
	calibrate'.	CEO's role is not at
		Board level for this
		new project).

### ANECDOTAL FEEDBACK ON THE ADAPTATION OF THE RSD PENTAGON:

A recent email received during the preparation of this paper from one of the recent MBA graduates in the study had this to say about the adaptation of the RSD Pentagon:

"Thanks for sharing your updated strategy tool. I like the 1-pager concise format to help us keep on point (why - purpose and for who?) plus pointers for understanding current situation and adapting all of this to a relevant strategy. Also like the reminder to 'go to the centre' when in doubt to ensure all the facets of strategy thinking framework being developed are working towards coherent recommendations to address internal / external issues faced. No doubt, users of the tool will be able to go deeper in each area via other references / readings on subject matter related to the headings of the pentagon."

COMMENTS: He graduated March 2017 and is due for a followup interview and self assessment reflection after March 2018.