

# **Sowing the Seeds of Success: The Provision of a Personalised Study Time Management Plan**

Vasanth Abeysekera  
*University of Southern Queensland, Springfield, Queensland, Australia*

Ashoka Abeysekera  
*Business Manager, University of Southern Queensland, Springfield, Queensland, Australia*

## **Abstract**

To assist students to better manage study-time, the authors took a fresh approach in a previous study deviating from a traditionally adopted personal time management focus to a project management focus. The framework developed in the previous study, later labelled as REST, underpinned this study. One element of this framework calls for a good understanding of the 'scope of work' to facilitate 'success'. To make the scope of work more understandable and manageable, an editable, bar-chart-style personalised milestone-time-plan with scheduled assessments for all courses was provided to selected first and second year construction and civil engineering students. A questionnaire-survey was carried out to establish current practice and ascertain the suitability of the proposed time-plan with respect to its usefulness, style, adaptability, and integration. Students use calendars, diaries, and time schedules but also resort to various ad-hoc practices suggesting the need for study-time management training. The personalised bar chart was found to be more useful than the calendar provided on the online study desk. However, given that students place almost equal preference for bar charts and calendars, it is recommended that personalised time-plans be made available in both formats. It is expected that with further training students may eventually move away from the less informative and inflexible calendar format to a more useful and strategically resourceful bar chart format to effectively manage scope of work.

## **Keywords**

Milestone plans, Scope of work, Study time, Time-plans, Time management

## **1. Introduction**

There is widespread concern that new-entrants to university face many challenges in adjusting to study, work, and life demands. It is more challenging today than a couple of decades ago, with more online programs of study. Structured and rigid course delivery options with compulsory attendance at school has now been changed to flexible delivery options with recorded lectures and no compulsory requirements on attendance, whether studying on-campus or online. No doubt, these and other developments have led students to a 'new' learning environment posing multiple challenges including how to succeed with studies and working to a different pace and rhythm in an environment that aims to develop independent learners. This transition from structured learning at school to semi-structured and often fluid learning options at universities needs to be managed carefully in their journey to become independent learners; developing good time management skills would be quite helpful in this regard, a core skill for independent learning (Calder, 1999; Polloway et al, 2001; Byrd, 2005).

Many have attempted to develop such skills with limited success given also that researchers themselves are not in agreement on how best to do so (Adamson et al, 2004)! Time is a special kind of resource over which there is no control; a complex construct that appears to be less understood (Hendry et al, 2004; Adamson et al, 2004). In a survey of 920 Nigerian university students, time-management was ranked as the most pressing counselling need (Aluede, 2006). Moreover, young learners find difficulty in managing time when compared with adult learners (Hayes, 1999). Additionally, those with work experience seem better at managing time than those without, based on authors' experience. Furthermore, there are concerns over how students manage non-instructional time (Ogonor, 2006). These concerns have evoked different responses: Some have used training modules on time management in orientation programs. Others have developed web tools such as activity logs, study period planners, flexible timetables, and diaries. Moreover, some online platforms provide calendars (such as Moodle) although there is evidence to suggest a lack of ignorance among students on availability of such tools and also at times a lack of willingness to see value in the use of these and develop strategies to be successful at studies. Clearly, there is a need to understand this problem further and find solutions to the development of this life-long skill.

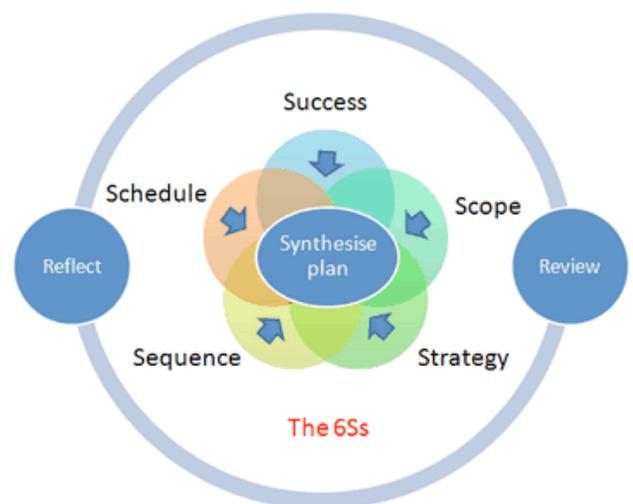
## 2. Background

Almost all studies on student time-management have focussed from a personal time-management perspective. However, authors (in 2007) took a fresh approach with the proposition that courses of study are similar to 'projects'; a temporary endeavour with a definite start and finish dates. They pointed out that this analogy provides a strong basis for the application of project management knowledge to managing courses of study. Just as project managers are trained in the management of projects for successful completion within stringent time constraints, students could also benefit by understanding how they could manage their study courses with similar time constraints. However, one of the challenges the authors faced was to develop a suitable framework to encapsulate the body of knowledge on project management. This was achieved by a framework that was aptly labelled as 'RRESSSSST' to empower students to choreograph study-logic through the development of a time-plan for achieving success (Abeysekera and Abeysekera, 2007). This framework is shown in Figure 1, with the study focussing on the second 'S', i.e. scope; success cannot be achieved without a good understanding of this element.

## 3. Study Objectives

According to project management know-how, understanding 'Scope' entails knowing 'exactly what the project will deliver' (OGC, p. 5) and also what it will not deliver (APM, p. 34) highlighting the importance of defining project boundaries as well (IPMA, p.58). Moreover, 'scope' is the 'sum of products, services, and results to be provided as a project' (Combined Standards Glossary, PMI, p. 56). Furthermore, 'Scope' is considered to comprise 'the **work** associated with producing those deliverables' (APM, p.34) **clearly within stipulated time period**. These explanations need to be understood if 'scope' is to be managed to ensure 'Success'.

In the REST framework, 'Scope' is defined slightly differently in that 'deliverables, outcomes, and results' are included under 'Success' and work that needs to be done are included under 'Scope' as it is important and necessary to give more emphasis to project benefits. In the case of courses of study undertaken by students, 'Success' needs to be defined by the student noting the necessity to obtain a pass mark to be



**Fig.1:**  
**RRESSSSST (REST) Framework**

successful. Scope then becomes the work a student needs to put in to accomplish ‘success’ within the stipulated time period knowing also what work needs to be done (and what is of less priority, what can be best left out, etc.), i.e. about project boundaries as noted earlier.

Managing scope within the study period (i.e. often within a semester) involves going through course resources (notes, readings, audio-visual recordings, participation in group-work and online forums, etc.) and also completing the assessments whilst developing appropriate ‘Strategies’ (prioritising work, developing a time-plan, setting deadlines for assignments with identical submission dates, etc.) in order to achieve ‘Success’ (note: according to previous work undertaken by the authors, ‘strategy’ is the element that is grasped the least by students; see Abeysekera et al, 2008). Therefore, ‘Synthesising’ a suitable ‘Schedule’ for doing so is fundamental. Given the importance of assessments on success, it is proposed herein that if students can be encouraged to prepare a study-schedule, i.e. a time-schedule, or if a time-schedule with assignment due dates (and weightings) can be given to them, it amounts to sowing the seeds of success which would also make it easier to understand ‘scope’ of work. Accordingly, a personalised study schedule was developed using a bar chart (see Annex) and this study investigates its usefulness, style, adaptability, integration, and further improvements.

#### 4. Methodology

Incidentally, the RRESSSSST (REST) framework was used since 2011 in a first year course on construction management at USQ (University of Southern Queensland). Students were given an assignment to produce a time schedule using the ‘REST’ framework as the basis, integrating personal time management issues as well, for 5% of the total marks. An indicative template for a time schedule was also provided. Annual course-end surveys in 2011 and 2012 established beyond doubt the value of this initiative. However, mature age students (with work experience) expressed that incorporation of study patterns, rates of completing study modules, etc. were of less value to some. Thereafter, in 2013, students were instructed to produce a time-plan with assignment submission dates only, and if necessary to include any other information. The submissions were encouraging and interesting as some have clearly thought through how they were to achieve success. However, this time-plan was submitted as part of the first assignment which was half way down the semester and judging by the results achieved by students, value of submitting such a plan at the halfway point of the course was seen less useful. Therefore, a new approach was trialled in the same year and with the assistance of the Learning Systems Support staff at USQ, a **specific milestone time-plan** (with assignment submission dates) was generated for each student (see Annex).

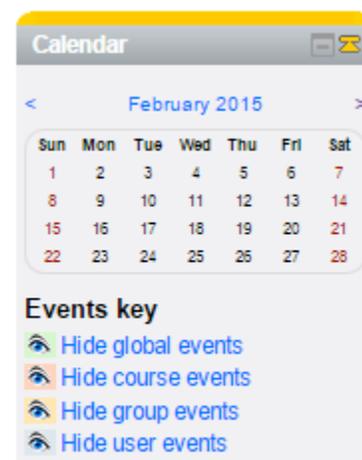
This time-plan (displayed as an Excel bar chart) shows all courses a student is enrolled in (first column), assignment type and weighting (next two columns), other columns display calendar weeks with the due date of assignment displayed in the relevant cell (see Annex). Additional information such as meetings for group work, when self-assessment questions will be completed, etc. could be included along with strategies for dealing with multiple assignments/tests etc. which fall on the same date.

Approximately 100 first and second year construction and engineering students were randomly chosen to assess the usefulness of the milestone plan for study management. A questionnaire seeking information on current practice and their perceptions on the milestone plan was emailed to them with their **personalised** time-plans during the first two weeks of 2013 second semester, receiving 58 responses. Results of this survey are discussed in the next section. It needs to be pointed out that all courses at USQ are delivered through an online platform using Moodle with approximately 70% of external students and the rest on-campus.

#### 5. Results

## 5.1. Current practice

The online platform used for delivering courses provides the calendar view in Figure 2 with either course related events and/or all events displayed. This can be expanded to show events over the last three months or over a specified range as required. Additionally, it can be integrated with the email calendar.



### 5.1.1. Usefulness of calendar plan

Students were asked whether they use this calendar for managing studies. Only 24% stated that they do so suggesting the need to inform students about this facility (in case they were not aware) so as to develop time conscious attitudes.

When asked to rate its usefulness, those using it stated that it was only useful to a **'moderate or less than moderate extent'** with a score of 2.79 out of 5. A score of 1 indicated 'useful to a high extent', a score of 5 indicated 'not useful at all' and a score of 3 indicated 'moderately useful'. Unlike the barchart emailed, this view does not provide a course by course view of assignments as the basis for listing information and therefore less friendly and useful as per the responses received.

**Fig. 2:**  
**Calendar in Moodle**

### 5.1.2. Other practices

They were also asked to provide other practices they use to manage time; Table 1 shows the responses.

**Table 1: Practices used by students for managing time**

Practice	No. of responses
Study timetable (in course docs)	3.7%
Calendar	27.3%
Diary	14.5%
Time-plan	14.5%
Other (whenever I can; work on most urgent assignment first; use days not at work; writing down all my assignments at the front of my books and date they are due; figure out what I need to study, study it 1hr and review it 30 min; study vs assignment time fluctuates as assignment comes due; look on asignments week to week to see what I can cover during that week's lectures; write down important date and reminders;] phone reminders; [use] chart at home; have set days for certain subjects and study relevent modules; own excel spread sheet; fit in when I can and cram for few days before exams	40%

The main practice is seen as the use of Calendars and then the use of diaries and time-plans. However, a considerable number of respondents use ad-hoc approaches (see 'Other'), some of which suggest that students may benefit from a more systematic approach for study-time management such as the use of REST framework and barcharts as time-plans. This will involve educational institutes taking a more formal approach for educating how study-time can be managed effectively.

## 5.2. Proposed milestone time-plan (as a barchart)

### 5.2.1. Usefulness

As noted before, a personalised milestone plan which provided information on all courses a student was enrolled in and the summative assignments that were due along with the weightings of marks and due

dates was sent to students seeking their responses in relation to the usefulness of milestone plan. They could use this Excel worksheet to incorporate additional information in a strategic way to achieve success.

When asked to rate its usefulness, a score of 1.93 was received meaning that students considered it to be ‘useful to large extent, or useful’ as the score was less than 2. Of the 58 responding, 21 students (43%) stated the milestone plan was ‘useful to a large extent’ ( a score of 1) whilst 16 (28%) stated that it was ‘useful’ (a score of 2). This amounts to a total of 71% who claimed that it was either **very useful or useful** with only 7% stating that it was useful to a moderate extent. This is a far better score than what was received for the usefulness of the calendar time-plan (i.e. 1.93 against 2.79; smaller the score, more useful it is).

In summary, the results show that the barchart milestone time-plan is much more valued and useful **for managing studies** than the calendar time-plan.

### 5.2.2. Ways of accessing time-plan

Four approaches were suggested for accessing the time-plan and they were asked provide their choice with multiple entries if required. Responses received are shown in Table 2.

**Table 2: Preferred options for downloading time-plan**

Approach	Percentage of responses
Downlaod from Study Desk (of any course enrolled in)	42.7
Mailed to the email account	25
Download from UConnect	18.8
As an online webpage	13.5
Other	0

Note: UConnect is a page that acts as an introductory page before accessing various courses that a student is enrolled in

Results show that the most preferred option is to download the time-plan from the online portal for a course that a student is enrolled in. At present, only the Calendar time-plan is available (as noted earalier) but it would be desirable if the Excel time-plan could also be made available.

One of the issues that needs to be taken care of it is to see that the plan is a dynamic document which is refreshed on a frequent basis (ideally daily) so as to reflect the most current information.

### 5.2.3. Milestone time-plan information and formatting issues

An example of milestone plan provided to a student (as an Excel file) is shown in the Appendix as noted before. Students were asked to rate to what extent they were satisfied with the formatting of their personalised time plan along with what improvements they would wish to see. Note that as at the time of doing the survey, time was of essence as the authors were keen to launch it at the beginning of the second semester 2013 without delaying the survey with much improvements to the worksheet generated by the Learning System Support staff at USQ.

The level of satisfaction with the formatting of the time-plan was evaluted to be 2.36 suggesting that students were ‘more than moderately’ satisfied. Understandably, various improvements were proposed by students and these are shown in Table 2 although other improvements are possible (e.g. instead of using week1, 2, 3, etc. as headings for the time axis, month could be used with dates).

**Table 2: Improvements to milestone plan formatting**

<b>Issue</b>	<b>Feedback</b>
Information	Could be more detailed; add exam dates; what date assignments should be started and handed out; addition [columns] for starting times like in MSProject
Column headings	Week going down the page
Font/Clarity	Larger writing; larger text; better font to make it appealing; dates can be presented more clearly
Colour	Different subjects in different colours; different colours; have the grey area finish when the assignment is due and not have it extended to the date of the last assignment of that course, other than that it's really good
Lines	Difficult to track days/weeks/dates with the box lines hidden; be more easier to line up; lines to separate the weeks and tasks
Printing	Printer friendly hardcopies

In relation to comments made regarding 'information' needs, at the time of providing the milestone plan, exam dates were not available. As such these could not be included although it would be useful to have such information included as well when students commence studies so as to understand 'scope' better. As noted earlier, the time-plan needs to be updated regularly to reflect changes with the onus on students to download the latest version. This may cause some inconvenience particularly for those who intend to edit the Excel worksheet although it should not be too much of a problem.

In relation to the need to use the the Excel file similar to a time-plan produced on MSProject (or similar project management software packages), the Excel file is a useful format to adopt as it can be often be imported into most project management software (such as MSProject).

### **5.3. Preferred computer file types**

In relation to the preferred file format, 59% stated that Excel was the most preferred format which justified the decision to provide personalised milestone plans in this format. The next was Pdf with 24% stating it as the preferred option and with MSWord preferred by 14%. The preference for MSProject understandably low with first and second year construction and engineering students.

The Pdf format was preferred by almost 25% of the respondents. It seems that the need for an editable plan is minimal by this group; perhaps, they are not too familiar with Excel or with barcharts. However, it must be pointed out that those who fail to use time-plans as a static document may not see its value of using the time-plan strategically – a skill that needs to be developed so as to improve their chances of achieving success.

### **5.4. Style – Choice between a calendar and a barchart style time-plans**

The time-plan can be presented as a calendar or as a barchart as must be clear by now. In response to a question on which of the two was most preferred, responses were mixed with barcharts being slightly favoured (52%) over calendars (48%). The survey sought the reasons for their preferences as well. Table 3 gives the reasons for their preferences:

**Table 3: Preferences for barcharts and claendars**

Preference for Barchart (52%)	Preference for Calendar (48%)
Easy to edit and make comments; highly compatible with most computers	Download a calander to iphone, ipad etc..
Easier to follow; easier to read and understand; better layout	Easier to understand; easier to view; tables makes it easy; makes it really clear what is due and when; looks neat, assignment dates are easy to identify
It shows all events over the coming month allowing faster and easier prioritising and provides reminders as the dates get closer	Can see better what is to come ahead; ability to plan ahead; it makes things easier to organise and never miss a due date
	Already using Calendar style
	[Claendars are] easier to use because of non-familiarity with barcharts
	Easier to access [i.e. available through studydesk]

It was pointed out earlier that students perceived that barcharts were more useful than calendars (section 5.2.1). In other words, what some seem to express is that notwithstanding the fact that barcharts are more useful they would prefer the Calendar. This seems a bit paradoxical but the message to decision makers is that both formats should be made available to students which may help them to move from using a less informative and flexible format (calendar) to a more useful and strategically positioned barchart time-plan to overcome perceived differences between the two styles. Perhaps, there is also a need to give a brief training on how to use barcharts given that more students perceive barcharts to be more useful.

## 5.5. Adaptability

### 5.5.1. The opportunity to edit the time-plan

In section 5.3 it was pointed out that almost a quarter of the respondents preferred the Pdf file format which seems to suggest that these students plan to use the time-plan as a static document. It was also pointed out that this was not a desirable approach from a strategic viewpoint as re-planning is essential to be in control and thereby facilitate success. This issue was probed further by asking students to what extent they need an editable time-plan. The responses was encouraging receiving a score of 2.04, i.e. to a 'large extent' to 'more than a moderate extent'.

### 5.5.2. Integration with devices

Responses to two questions were raised in this section of the survey, i.e. the importance of integrating the time-plan with the email calendar and the mobile phone calendar. Scores received were 2.33 and 2.16 suggesting that it was quite important to them.

## 5.6. Other improvements

This was briefly discussed in '5.2.3: Milestone time-plan informaton and formatting issues'. Other improvements suggested along with their feasibility is shown in Table 4.

**Table 4: Further improvments and feasibility**

Suggestion	Feasibility
An automatic integrated schedule for all courses	Easy with barcharts; crowded and confusing with calendars
Ability to add input after receiving	Easier with barcharts than calendars
Add links to assignments	
Indicate when to start on an assignment	Well accommodated with barcharts than calendars
Allow a column to calculate/input your current mark to work how much you need for final exam	Easier with barcharts

Given the suggestions made above and along with other comments made earlier, authors are of the opinion that these and other improvements suggested by students are better handled through barcharts than calendars. In essence, the time-plan should make it easier to understand 'Scope' and the suggestion of indicating when an assignment could be started is noteworthy as academic staff can be helpful here; in fact, this is an issue that deals with the 'Strategy' element in the REST framework for achieving success.

## 6. Conclusions and Recommendations

The purpose of this research is to understand the usefulness of an editable barchart-style milestone time-plan in an Excel file to first year and second year construction and engineering students so as to make it easier for students to understand and manage 'scope of work' and thereby facilitate success. Having first explained the need for it and a framework for doing so, this study concludes that the barchart provided is more useful and beneficial than the calendar available on studydesk and the calendar format in general. However, given that students have almost an equal preference for barcharts and calendars, it is recommended personalised time plans in the barchart form should also be provided through studydesk which may eventually help students to move from the use of a less informative and flexible practice (i.e. calendar) to a more strategically resorceful format of a barchart time-plan. It is also recommended that an online training program be developoed to develop skills on studytime management and also to facilitiate the use of barcharts including how the REST framework could be used for ensuring success. The usefulness of personalised time plans as barcharts could be enhanced further by responding to suggestions made by students as appropriate, and by incorporating various other modifications to the personalised milestone plans. Finally, a comment from a respondent summarises the main message of this paper:

*"This is a wonderful idea.*

*Currently I use a diary and also enter the deadlines but this is [i.e. barcharts are] more useful"*

## Acknowledgements

The author wishes to acknowledge the support extended by the Learning Systems Support Group at the University of Southern Queensland particularly to Craig Griffith for his assistance.

## References

- Abeysekera, V. & Abeysekera, A. (2007) Developing time management skills of young learners using project management knowledge, *Proceedings of the annual conference of the Australian Association of Engineering Educators*, Auckland, December
- Adamson, B.J., Covic, T. & Lincoln, M. (2004). Teaching Time and Organizational Management Skills to First Year Health Science Students: does training make a difference? *Journal of Further and Higher Education*, 28, 3, 261-276.
- Alude, O. (2006). Academic, Career and Personal Needs of Nigerian University Students. *Journal of Instructional Psychology*, 33, 1, 50-57.
- Byrd, K. L. (2005). Defining College Readiness from the Inside Out: First-Generation College Student Perspectives. *Community College Review*, 33, 1, 22-37.
- Calder, A. (1999). Orientation – the best of both worlds. *Journal of the Australian and New Zealand Student Services Association*, 13, 79-87.
- Hayes, S. (1999). Youth and University, *Journal of the Australian and New Zealand Student Services Association*, No. 13, April, pp. 28-34.
- International Project Management Association (APM), (2006) *ICB-IPMA competence baseline version 3.0*, IPMA, The Netherlands, p. 34.
- Office of the Government of Commerce (2009) *An introduction to PRINCE2TM: managing and directing successful projects*. The Stationery Office, London, p. 5.
- Ogonor, B. (2006). An Analysis of Non-Instructional Time Management of Undergraduates in Southern Nigeria. *College Student Journal*, 40, 1, 204-217
- Project Management Institute (PMI), (2005). *Combined Standards Glossary*, 2<sup>nd</sup> Edition, p. 56
- Polloway, E.A., Patton, J.R., & Serna, L. (2001). *Strategies for Teaching learners with special needs* (7th Ed.). Pearson/Merril Prentice Hall

## Annex: Personalised Study Time Management Plan (with assessments dates only)

1 Name: xxxxxxxxxxxx																		
2		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Semester Break	Semester Break	Week 13	Week 14	Week 15	Week 16	
3 Course	Assessment Item	Weight	15/07/2013	22/07/2013	29/07/2013	5/08/2013	12/08/2013	19/08/2013	26/08/2013	2/09/2013	9/09/2013	16/09/2013	23/09/2013	30/09/2013	7/10/2013	14/10/2013	21/10/2013	28/10/2013
4 Engineering Statics	ELECTRONIC TUTORIAL 1	3			Fri 2nd August													
5 Engineering Statics	ELECTRONIC TUTORIAL 2	4						Fri 23rd August										
6 Engineering Statics	ASSIGNMENT	20								Fri 6th September								
7 Engineering Statics	ELECTRONIC TUTORIAL 3	7											Fri 27th September					
8 Engineering Statics	ELECTRONIC TUTORIAL 4	3													Fri 11th October			
9 Engineering Statics	ELECTRONIC TUTORIAL 5	3																Fri 26th October
10 Engineering Statics	2 HOUR RESTRICTED EXAMINATION	60																
11																		
12 Job Organisation	ASSIGNMENT	30							Fri 23rd August									
13 Job Organisation	2 HOUR RESTRICTED EXAMINATION	70																
14																		
15 Spatial Science for Engineers	ONLINE QUIZ 1	15																
16 Spatial Science for Engineers	ONLINE QUIZ 2	15																Mon 2nd September
17 Spatial Science for Engineers	2 HOUR RESTRICTED EXAM	70																Mon 21st October