

Learning Teamwork – using simulations and Profiles to guide team-based activity in an academic program.

Introduction

This case study is a preliminary report on academic use of a simulation and two profiling instruments as a multi-mode learning strategy at an Australian university. The context is a post-graduate subject combining use of action learning and problem-based learning to develop graduate capabilities relevant to workplace-based education roles.

The student participants are adults developing professional capabilities as educators in a wide range of professional disciplines. They are assigned to project teams to create a representation of a professional consultancy. Within the simulation scenario each team must develop and present a response to a 'request for tender' for provision of educational services in a fictional country.

As participants work on the tender documents they are learning about – and beginning to extend or develop – a wide array of relevant capabilities for working as internal or external consultants in educational contexts. The end point is a formal presentation to a panel of experts – not course staff – acting as 'representatives' of the fictional government which issued the request for tender. Learning outcomes vary widely – as the design is intentionally managed to enable individuals to focus on their own learning needs and professional goals, so it is not possible to collate 'outcomes' in neat packages. But it is possible, after four years of use, to say that participants are always fully engaged with the process and can identify highly personal and specific benefits for career goals personal development.

Background to the Learning Program

As adults we often believe we have little time to devote to 'learning' in a conventional sense, yet find ourselves almost constantly 'learning' our way through daily routines just to keep up with the rate of change around us. This paradox may become most painfully obvious when individuals choose to re-enter a formal study program while continuing to work full time.

The drive to achieve new academic goals frequently impacts (often painfully) on the demands of daily work and family routines and needs. Experienced a strong need 'to learn' new things, they enrol in a post-graduate program yet must also continue managing their 'learning' about new technologies, new jobs, new family roles. Addressing these competing demands to achieve career/life goals creates an on-going tension for each individual to solve.

Designers of academic programs where these students enrol, face complex choices about how to provide relevant and effective learning environments. Educators who understand that some of those career/life goals may not match institutional interpretations of

'academic goals' are particularly challenged to find ways to reconcile goals that may be both competing for attention and in conflict with each other. The ability to combine real world elements paralleling current and continuing learning needs, with a format that shifts the immediate focus to a 'strange, unknown' context enabled one group of designers to create an unconventional simulation-based learning experience called "*Katalonia*".

This experience embeds a different understanding about the way that the concepts of 'to learn' and 'learning' are part of a continuum of meanings and actions but are not the same thing. While adhering to conventional academic standards and requirements, it was specifically designed to provide scope for participants to identify and achieve personal goals. It parallels the kind of real life demands facing participants (or likely to be encountered in the near future) and the use of instruments and a team-based working environment replicates components of current workplace employment trends.

Setting the Scene

Early in the semester participants complete the TetraMap and Belbin personal profile instruments and attend a workshop to examine what these might tell them about how they can work together to achieve the best possible outcomes. Individual and team profiles are shared, and implications of this information for their future performance are considered in relation to how best to work together in the 'consultancy' they are developing. Participants' reactions vary widely – both in regard to the approach and the content. The details of these reactions will be considered in a different paper. For this case study the following brief comments provide a setting for understanding the use of the two instruments.

The first thing to note is that Tuckman's* theory of group development provides an excellent summary of the repeated pattern of group dynamics. At the beginning participants are 'waiting' for information and prepared to 'do as told' in order to get to a safe point where they will begin to feel they understand what is happening. As they come to understand that they will be 'doing the work' and that there are no teachers to tell them what to do Tuckman's aptly named 'storming phase' can set in. For the teaching staff this can be a difficult time. Participants may begin to demand to be 'told what to do' and profile characteristics may become evident. Those needing 'action', who like a challenge and are not disabled by uncertainty (for example 'Fire' in the Tetramap profile, and 'Plant' in Belbin) may leap into action enjoying the novelty of the 'new'. Others who need specific information (Tetramap's 'Air' - Belbin's 'Completer Finisher') may become temporarily 'frozen' waiting for the 'right information'.

The 'storm' will last for a longer or shorter time depending on personalities, prior perceptions of 'teaching' and 'learning' but eventually the 'norming phase' arrives as staff hold steadfast to a neutral role of guide not teacher, and impending deadlines create sufficient urgency for action. And the action itself is – of course – the key as it unfreezes those held in place by a 'need to know before acting' (TetraMap's 'Earth' and Belbin's 'Monitor Evaluator').

As this phase takes hold and productivity rises, individuals begin to look back, and often report seeing just how much of their actual behaviour and causes of 'resistance' were predicted by the two instruments.

By the time teams are ready to make their presentation to the 'panel of experts' their focus is almost entirely on how best to work and share together to achieve the best possible results. 'Performing' has become the mode of operation and all available effort is dedicated to making theirs the 'winning tender.'

Finally after the panel of experts has conferred and announced the winning tender there is a debriefing, a celebration (as this is a weekend workshop we often have a 'party' to close) and the 'mourning' phase is over. The learning however goes on and on as participants report in their end of semester feedback.

Learning outcomes

Simulations and profiling instruments are not widely used in academic settings. Habits of objectivity and theorisation seem to inhibit academics from 'playing with' knowledge and use of experience to expand knowledge. Yet the results of this design, as indicated by the quality of completed tender documents and formal presentations to the panel, leave no doubt about the extent of the learning that has been completed by each team and its members.

Participant feedback also consistently indicates that the experience has contributed – in numerous and different ways - to improved understanding of such things as

- ▶ teamwork principles
- ▶ effective use of relevant personal profile instruments
- ▶ the importance of re-thinking current perceptions of 'learning'
- ▶ the vital importance of gaining greater understanding of personal preferences

Contribution of the Profiles

The difference between a study team that is working with the aid of profiles, like Tetramap Belbin, and one working without, it is in the simple but powerful fact that the former has a means of understanding what is happening when tempers fray and individuals push in different directions. Reference to the team members' profiles enables a team to ascertain where their strengths are and how to come together with purpose and intention. In this academic subject the teams are assigned randomly, so there is little likelihood that any of the teams are 'balanced' in regard to their Tetramap or Belbin preferences.

This anticipation of 'out of balance' teams is deliberate. It replicates the conditions found in workplaces where professional knowledge and positional authority determine team membership without reference to personal preferences or 'functional' capabilities.

However the study teams are advised to pay attention to the profiles and their implications for the way the team will perform. Since there are no 'positional power plays' to disrupt the effort, the task will surface 'default behaviours' and emphasise how these shape routine

reactions to pressure and deadlines. Teams that describe re-visiting the profile reports to consider how the team is developing are also those who report a more balanced team environment. In other words knowing in advance 'how' things will develop in regard to such things as emotional and work-effort priorities enables the team to reduce tension among its members, with improved focus on different capabilities and contributions.

TetraMap

The TetraMap profile instrument is readily available, highly flexible and easy to understand. Yet it provides a depth of information and personal insight sufficient to enable individuals to shape their team work plans and make informed choices about how to collaborate and fit this complicated and somewhat 'mysterious' subject into their busy schedules. It fits the learning context particularly well because the fictional country of the Katalonia tender is set 'somewhere in Asia' with both Eastern and Western socio-political influences similar to those from which TetraMap draws its underpinning theoretical frameworks.

As participants grapple with the detail of tender forms, the urgency of creating original educational programs, the stresses of family/work/learning pressures with people they have not met before and focus in on a looming deadline, TetraMap serves as a guide to the differences among their profiles. The 'Fire' dominant individual will be energised by the 'originality' and differentness of it all. They are likely to dive into designing the education program with (often) scant regard for financial details or 'trivia' like logistics and language and culturally differences. Straining against the rush to action are any 'Air' individuals who 'need all the details' and want to collect and assess everything before 'doing anything'. As work proceeds individuals with a modicum of 'Water' finds themselves spending time soothing ruffled feelings and edging the team towards naming and facing the internal stressors that are both driving and restraining team effort. And of course the 'Earth' bound members are working methodically and steadily on.

Belbin

While TetraMap asks individuals about their preferences in regard to 'life in general', the Belbin Self Perception Inventory is specifically oriented to Team Role Preferences and closely linked to identified team functioning. In developing the instrument Meredith Belbin realised that teams have 'functional tasks' that guide their operations. These tasks are at a different level from the practicalities of – for example – collecting data, analysing information, writing reports etc. instead the Belbin 'functional tasks' concern the actual working of the team as a coherent and coordinated entity. One way of arranging his nine task/preference is as follows: two function are concerned with leadership and setting direction ('Shaper' and 'Co-ordinator') two are concerned with establishing and extending ideas and external contacts ('Plant' and 'Resource-Investigator') three are various concerned with aspects of the detail and quality of the internal working of the team and its performance and products ('Completer Finisher' and 'Monitor-Evaluator' and 'Team Worker') one is concerned with getting that work out into the world once it is under way

(‘Implementer’) and one has a focus on the ‘Specialist’ contribution of professional knowledge etc.

Throughout the course of the subject teams are encouraged to consider their work as having a sequential development and to pay attention to ways in which the various functional preferences contribute throughout the ‘life’ of the project. Those with strong preferences for ‘Plant’ and/or ‘Resource Investigator’ activity – for example contribute most at the beginning of the project and may have to restrain their enthusiasm for new ideas and more input as work moves completion. Conversely those inclined towards ‘Completer Finisher’ and ‘Monitor Evaluator’ preferences may need to restrain themselves at the beginning as ideas are tossed around and ‘confusion reigns’.

Concluding comments

As the project develops, the use of the two profiles allows individuals to regularly reassess their contribution and to do so in conjunction with an appraisal of their impact on their teammates. It is unfortunate that this does not happen often in workplaces – except in places which have clear -sighted leadership with an understanding that team work is a process requiring ongoing attention. As long as knowing how to be a good team member is considered to be ‘innate’ or (worse) not worth attending to, teamwork is likely to be a problematic context in which individuals fumble their way to some sort of acceptable outcome and then race away from the experience – hoping never to re-enter it.

Having the ‘luxury’ of being able to combine theory and practice in an academic context provides scope for ‘slowing down’ the rush to complete a task. It allows time to draw attention to underlying factors creating ‘good’ and ‘bad’ team experiences. By providing access to TetraMap and Belbin in a simulated environment - as tools to help explain what is happening, and how (and what) individuals contribute to the whole experience - Katalonia creates an experimental – and experiential – context for learning about self and others. TetraMap and Belbin together enable individuals to ‘see’ themselves as others see them and to develop strategies for reducing any negative impact on teams of their strengths and enthusiasms, while increasing and enhancing the positive impact of their unique contributions.

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*Tuckman, B. W. (1990). Development sequence in small groups. Psychological Bulletin, 63, 384-99. Management and Organisational Behaviour. L. J. Mullins. UK, Pitman Publishing.