



Higher Education Research and Development Society of Australasia, Inc

Critical Visions

Thinking, learning and researching in higher education

Proceedings of the

29th HERDSA Annual Conference

10-12 July 2006

Perth, Western Australia

Ritter, L. & Covic, T. (2006) What makes for a good tutorial: Listening to the students, in *Critical Visions, Proceedings of the 29th HERDSA Annual Conference, Western Australia, 10-12 July 2006: pp 286-292.*

Published 2006 by the
Higher Education Research and Development Society of Australasia, Inc
PO Box 27, Milperra, NSW 2214, Australia
www.herdsa.org.au

ISSN: 0155 6223
ISBN: 0 908557 69 8

This research paper was reviewed using a double blind peer review process that meets DEEWR requirements. Two reviewers were appointed on the basis of their independence, expertise and experience and received the full paper devoid of the authors' names and institutions in order to ensure objectivity and anonymity. Where substantial differences existed between the two reviewers, a third reviewer was appointed. Papers were evaluated on the basis of originality, quality of academic merit, relevance to the conference theme and the standard of writing/presentation. Following review, this full paper was presented at the international conference.

Copyright© 2006 HERDSA and the authors. Apart from any fair dealing for the purposes of research or private study, criticism or review, as permitted under the Copyright, Design and Patent Act, 2005, this publication may only be reproduced, stored or transmitted, in any form or by any means, with the prior permission in writing of the publishers, or in the case of reprographic reproduction in accordance with the terms and licenses issued by the copyright Licensing Agency. Enquiries concerning reproduction outside those terms should be sent to the publishers at the address above.

What makes for a good tutorial: Listening to the students

Leonora Ritter

Charles Sturt University, Bathurst, Australia
lritter@csu.edu.au

Tanya Covic

University of Western Sydney, Sydney, Australia
t.covic@uws.edu.au

Abstract: This paper describes research by the authors into student views of ‘what makes for a good tutorial’. It draws on the results to discuss the attributes of effective tutorials and ways of accommodating individual differences, with particular reference to encouraging and assessing participation in tutorials.

Keywords: Tutorials; participation; student feedback

Introduction

In a study of student drop-out rates, Martinez and Munday (1998) found that two factors for success were ‘the student’s awareness of his/her own learning process and the lecturer’s response to the varied learning needs of the group’ (Briggs, 2000). Thus considering student preferences about tutorials is important in enhancing ‘authentic accommodation of individual differences in the classroom’ (Riding & Raynor, 1999) through recognising ‘the needs of different participants’ and supporting them in their learning (HERDSA Fellowship Professional Recognition and Development Scheme). This matters less with the most able students, but ‘if the individual preferences of students are ignored, those already most at risk of withdrawal or failure are put in double jeopardy’, including students from ‘a less academic environment ... from lower socio-economic groups, ... outside the ‘mainstream’ white culture, women, and those with disabilities’ (Smith, 2002). This is a growing concern as increased access to university has led to larger classes and a greater variety of learner (Smith, 2002; Zeegers, 2002) at the same time as fiscal and performance pressures are increasing the tendency to leave tutorial teaching to ‘apprentices’ (Ramsden, 1992).

Because people tend to teach from their own experiences and preferences (Entwistle, McCune & Walker, 2001; Riding & Raynor, 1999), student centred teaching requires enhancing tutors’ awareness of differences between themselves and their students. Appropriate psychometric instruments can contribute to raising this awareness.

The research reported in this paper originated from observations about the efficacy of the DISC instrument (Marston, 1928) that measures behavioural styles in the context of preferred ways of relating to people, classifying respondents as ‘Direct’, ‘Influencing’, ‘Stabilising’ and ‘Conscientious’ in response to their selection of self-descriptors out of 48 possible items. In this serendipitous instance, Ritter observed that student behaviour in different tutorials within a first year university subject (Communication Processes, taught in the criminal justice and policing degrees) corresponded with the results of administering a DISC instrument to students in a tutorial on individual differences. A particularly passive group had a majority of

‘stabilisers’; an uncontrollable group had a majority of ‘influencers’ and a ‘good’ group had a majority of ‘direct’ people.

Ritter then designed a follow-up survey, which was administered to the same students, asking them to identify themselves by their DISC descriptor and to select from a list of 40 characteristics ‘the five things that make a tutorial work well for you’. There was sufficient correlation between DISC descriptors and preferences about tutorials to suggest the value of further research in enhancing understanding and accommodation of differences between groups. It was notable, for example, that the tutor had perceived the passive group as having ‘unsatisfactory’ tutorials, whereas the stabilisers who made up that group expressed satisfaction with their relatively quiet and strongly led style of tutorial.

The research

Based on the follow-up survey, a questionnaire was developed to evaluate tutorial style preferences (the TSP). Respondents were asked to rate ‘the things that make a tutorial work well for you’ from a list of 38 items on a Likert scale where ‘1= not at all important and 5= very important’. The new scale was administered with the DISC instrument for comparison purposes.

The aims of the research were

1. to test the hypothesis that there were defining categories of preferred tutorial styles.
2. to discover whether there was a relationship between preferred tutorial styles and preferred behavioural styles as measured by the DISC instrument.

The questionnaires were distributed in class in a variety of subjects; 306 students responded, median age 19, age range 17-58, predominantly first year (71%) and female (80%) and from the discipline areas of psychology and education (91%).

Results

Factor analysis was used to determine categories of tutorial styles (see Appendix A). It indicated three factors: authoritarian, participatory, and enjoyable. Of these three styles, enjoyable (mean 3.9) was the most endorsed, followed by authoritarian (mean 3.88), with participatory (mean 3.57) being the least endorsed.

Correlation analysis was conducted to explore the relationship between TSP factors and DISC behavioural styles (Table 2). The strongest correlation was noted between TSP Participatory and DISC’s Direct and Influencing behavioural styles.

The link between the TSP and the DISC instruments was further illustrated by the correlation of individual TSP items with DISC quadrants.

Discussion

The results suggest that significantly different types of learner prefer significantly different types of tutorial. These findings particularly challenge widely-held assumptions about the primary importance of interactive discussion for all learners (Exley & Dennick, 2004:

Marmolejo, Wilder & Bradley, 2004; Myers, 2004; Boniecki & Moore, 2003; Fritschner, 2000; Howard & Henney, 1998; Wambach & Brothen, 1997; Martin 1993).

**Table 1: TSP factors: items that correlate >.5
(Pearson Correlation sig. (2 tailed))**

Authoritarian		Participatory		Enjoyable	
Clearly explained material	.67	Interesting debate	.65	Humour	.72
Direct teaching	.66	Lots of debate and argument	.64	Entertaining	.64
Orderly and well-organised process	.64	Lots of different ideas	.63	Bright people	.51
Handouts	.63	Lots of participation by others	.60	Emotionally safe environment	.51
Lots of information from tutor	.63	Material that stretches your thinking	.59	Interesting topic	.51
Clear learning outcomes	.59	Everyone encouraged to participate	.57		
Strong control/leadership	.58	Open ended discussion	.57		
Detailed guidelines	.58	Interactive discussion	.55		
Building blocks to create understanding	.56				

**Table 2: correlations >.2 between TSP factors and DISC behavioural styles
Pearson Correlation sig. (2 tailed) at p > .2**

TSP factors	DISC styles			
	Direct	Influencing	Stabilising	Conscientious
Authoritarian			.23	.25
Participatory	.35	.38		
Enjoyable		.26	.29	

**Table 3: correlations >.2 between individual TSP items and DISC behavioural styles
Pearson Correlation sig. (2 tailed)) irrespective of TSP factors**

Direct		Influencing		Stabilising		Conscientious	
Everyone encouraged to participate	.30	Everyone encouraged to participate	.39	Calm atmosphere	.26	Discussion based on readings	.23
Lots of participation by you	.30	Lots of participation by you	.31	Handouts	.23	Orderly and well-organised process	.22
Material that stretches your thinking	.22	Interesting debate	.30	Clearly explained material	.22	Clearly explained material	.22
Lots of different ideas	.22	Entertaining	.30			Calm atmosphere	.21
Lots of debate and argument	.22	Humour	.28			Lots of analysis	.21
Broad exploration of topic	.22	Clear learning outcomes	.28				
Students in control, tutor facilitates	.21	Students in control, tutor facilitates	.24				
		Working in small groups	.22				

Of the three TSP styles, ‘participatory’ was the least supported and ‘*interactive discussion*’, which was the most important attribute within this factor, was only ranked eighth overall (see table 4); furthermore, more strongly endorsed attributes, including ‘*obvious relevance*’, ‘*clearly explained material*’ and ‘*strong direction by tutor*’, could be jeopardized by a high level of student contribution.

Table 4: The most popular TSP attributes (by mean) distributed across the three factors (>.4 by factor analysis Pearson Correlation sig. (2 tailed))

Attribute	Rank	Authoritarian	Enjoyable	Participatory
Obvious relevance to subject/course	1	.47		
Interesting topic	2		.51	
Clearly explained material	3	.67		
Strong direction by tutor	4	.42		
Clear learning outcomes	5	.59		
An emotionally safe environment	6		.51	
Orderly and well-organised process	7	.64		
Interactive discussion	8			.55
Easily understood packaged knowledge	9	.54		
Building blocks to create understanding	10	.56		

There was also a wide variation in the importance accorded to attributes that indicate high levels of social interaction, including ‘*lots of debate and argument*’, ‘*lots of participation by you*’, and ‘*bright people*’ (see Appendix A).

The DISC factor analysis produced similarly divergent results (see table 3). Direct types and influencers tended to like interaction, but stabilisers and conscientious types did not value high levels of interaction. These findings support the findings of other observers and researchers that in low participation classes, students become ‘irritated’ with ‘talkative’ peers (Fritschner, 2000, 342) and that there are differences between students in desired level of structure of instructional activities and of social interaction (Entwistle, McCune & Walker, 2001; Renzulli & Dai, 2001).

‘*Not being forced to participate*’ emerged as particularly important and produced the greatest variation in TSP responses. It is also notable that the TSP item, an *emotionally safe environment*, was important to many students, being ranked 6th overall. This contra-indicates enforcing participation, as enforcement can place strains on students, produce a counter-productive ‘sense of inadequacy’ (Ramsden, 1992) and threaten non-conforming personalities who prefer to avoid debates (Barsky & Wood, 2005); the resulting anxiety may encourage ‘a surface approach’ to learning (Heywood, 1989, p. 81) and divert learning-energy into developing avoiding and protective behaviours.

These findings have implications for a number of well-used strategies, such as in-class debates, calling on people by name to contribute, and are most relevant if participation is enforced through summative assessment. If tutorial behaviours are, at least to some extent, the product of sub-conscious preferences, as the TSP and DISC outcomes suggest, then there is a danger that assessment of ‘participation’ will not measure what it claims to measure, but merely assess the fit between student preferences and learning environment, rewarding those who find speaking out empowering and disadvantaging those who find it threatening or overwhelming. This makes it neither valid nor effective (Logan and Thomas, 2002; Zhang and Sternberg, 2000; Brown and Knight, 1994).

These findings do not contradict the literature that suggests that students learn best when they are actively participating in class (see Fritschner, 2000); rather, they beg a recognition that participation takes many forms and that enforced verbal contribution may not enhance the learning of all students.

It is notable that the students saw encouraging participation as different from forcing it. The TSP preference for *not being forced* correlated, albeit weakly, with *lots of participation by you* (.22) and *everyone encouraged to participate* (.21). This suggests the need for non-threatening strategies which effectively encourage and/or teach effective interaction (Ahlfeldt, Mehta & Sellnow, 2005; Exley & Dennick, 2004, Smith, 2002, 66). This involves both respecting students' preferences and pushing them to grow (Felder and Brent, 2005). The potential of such strategies is reinforced by indicators that participation increases with class level and participants' age (Ahlfeldt, Mehta & Sellnow, 2005; Fritschner, 2000), the belief that there is a developmental component in the acquisition of appropriate learning styles (see Zeeger, 2002) and the predominance of first years in the TSP sample, which may account for the importance of authority relative to participation.

Conclusion

This paper demonstrates how reflection on a classroom experience can lead to formal research. In this case, reflection on tutorial style preferences has produced a new evaluation instrument, the TSP, and identified the potential of the DISC instrument in contributing to our understanding of tutorial behaviour.

The results of administering both instruments suggest that variations in the levels of participation between individuals and groups should be expected and accepted, and that variations between groups, which are often attributed to tutors' efforts or students' abilities (Ramsden, 1992), may result from the preferred style of most members of the group. This could either be the result of the sum of each student responding with his/her preferred style, or the product of the interaction of the students within the group. In either case, the TSP and DISC instruments could help tutors to understand that a variety of tutorial approaches are required to optimise them as learning environments for all students, and to identify which tutorial styles are preferred by each individual/group in order to facilitate tailoring tutorials to the students' needs. This is particularly important in choosing between prescriptive and open ended tasks, and directed or self-regulated relationships, because these characteristics impact on all members of the group and tend to negate each other.

Respecting students' preferences requires reflection on our assumptions about motivating and evaluating particular student behaviour in tutorials. In particular, respect for different forms of participation should be developed, taking into account the variety of preferred tutorial styles. Where student contribution is desired, it should be encouraged and facilitated rather than forced. In doing this, the TSP and DISC instruments could be used to make students aware of how they approach tutorials, help them select approaches that suit them and develop strategies for managing unwelcome situations.

References

- Ahlfeldt, S., Mehta, S., & Sellnow, T. (2005). Measurement and analysis of student engagement in university classes where varying levels of PBL methods of instruction are in use. *Higher Education Research and Development*, 24(1), 5-20.
- Barsky, A. E. & Wood, L. (2005). Conflict avoidance in a university context. *Higher Education Research and Development*, 24:3, August, pp 249-64.

- Briggs, A. R.J. (2000). Promoting Learning style analysis among vocational students. *Education and Training*, 42(1), 16-23.
- Boniecki, K. A. & Moore, S. (2003). Breaking the silence: Using a token economy to reinforce classroom participation. *Teaching of Psychology*, 30(3), 224-227.
- Brown, S. & Knight, P. (1994). *Assessing Learners in Higher Education*. London: Kogan Page.
- Dawson, S. (1998). *Effective Tutorial Teaching*, Melbourne: RMIT Publishing.
- Entwistle, N., McCune, V., & Walker, P. (2001). Conceptions, Styles, and Approaches within Higher Education: Analytic Abstractions and Everyday Experience. In J. J. Sternberg & L. Zhang, (Eds.), *Perspectives on Thinking, Learning and Cognitive Styles* (pp 103-136). Mahwah, NJ: Lawrence Erlbaum Associates.
- Exley, K. & Dennick, R. (2004). *Small Group Teaching*. London: RoutledgeFalmer.
- Felder, R. M. & Brent, R. (2005). Understanding Student Differences. *Journal of Engineering Education*, Jan., 94(1), 57-71.
- Fritschner, L. M. (2000). Inside the Undergraduate College Classroom. *The Journal of Higher Education*, 71(3), 342-62.
- Heywood, J. (1989). *Assessment in Higher Education*. Chichester: John Wiley and sons.
- Howard, J. R. & Henney, A. L. (1998). Student Participation and Instructor Gender in the Mixed-Age College Classroom. *The Journal of Higher Education*, 69(4), 384-405.
- Logan, K. & Thomas, P. (2002). Learning Styles in Distance Education Students Learning to Program. In J. Kuljis, L. Baldwin & R. Scobie, (Eds.), *Proceedings of the Psychology of Programming Interest Group 14* (pp. 29-44). London: Brunel University.
- Marmolejo, E. K., Wilder, D. A. & Bradley, L. (2004). A preliminary Analysis of the effects of response cards on student performance and participation in an upper division university course. *Journal of Applied Behavior Analysis*, 37(3), 405-410.
- Martin, B. (1993). Increasing student participation in tutorials. *Overview*, 1(2), 8-11.
- Marston, W. (1928). *Emotions of Normal People*. Oxford: Harcourt Brace.
- Myers, S. A. (2004). The Relationship between Perceived Instructor Credibility and College Student In-class and Out-of-class Communication. *Communication Reports*, 17(2), 129-137.
- Ramsden, P. (1992). *Learning to Teach in Higher Education*. London: Routledge.
- Renzulli, J. S. & Dai, D. Y. (2001). Abilities, Interests, and Styles as Aptitudes for Learning: A Person-Situation Interaction Perspective. In J. J. Sternberg, & L. Zhang (Eds.), *Perspectives on Thinking, Learning and Cognitive Styles* (pp. 23-46). Mahwah, NJ: Lawrence Erlbaum Associates.
- Riding, R. & Raynor, S. (1999). *Cognitive Styles and Learning Strategies*. London: David Fulton Publishers.
- Sadler-Smith, E. (1999). Intuition-Analysis Style and Approaches to Studying. *Educational Studies*, 25(2), 159-173.
- Smith, J. (2002). Learning Styles: Fashion Fad or Lever for Change? The Application of Learning Style Theory to Inclusive Curriculum Delivery. *Innovations in Education and Teaching International*, 39(1), 63-70.
- Sternberg, R. J. & Grigorenko, E. L. (2001). A Capsule History of Theory and Research on Styles. In J. J. Sternberg, & L. Zhang (Eds.), *Perspectives on Thinking, Learning and Cognitive Styles* (pp. 1-22). Mahwah, NJ: Lawrence Erlbaum Associates.
- Wambach, C. & Brothen, T. (1997). Teacher self-disclosure and student classroom participation revisited. *Teaching of Psychology*, 24(4), 262-263.
- Zeegers, P. (2002). A Revision of the Biggs' Study Process Questionnaire (R-SPQ). *Higher Education Research and Development*, 21(1), 73-92.
- Zhang, L. & Sternberg, R. J. (2000). Are Learning Approaches and Thinking Styles Related? A Study in Two Chinese Populations. *The Journal of Psychology*, 134(5), 469-489.

Acknowledgements

This research was supported by a CSU Scholarship in Teaching grant. Our thanks to Associate Professor Graham Tyson for his help and support in analysing the data.

Appendix A – TSP results

Items	Mean	SD	Rank	TSP Components Pearson Correlation Sig. (2 tailed))		
				Authoritarian	Participatory	Enjoyable
Strong direction by tutor	4.2	.82	4	.42	.12	-.15
Interactive discussion	4.0	.90	8	.07	.55	.12
Lots of participation by others	3.7	.94	24	.05	.60	.07
Lots of participation by you	3.6	1.0	26	.13	.54	.01
Broad exploration of topic	3.8	.90	19	.25	.42	-.33
Lots of analysis	3.5	.95	27	.35	.45	-.16
Following up interesting ideas even if not directly relevant	3.1	1.0	33	-.10	.44	.22
Detailed guidelines	3.9	1.0	14	.58	.00	.06
A calm atmosphere	3.9	.98	11	.36	-.03	.45
Bright people	3.3	1.1	29	.00	.10	.51
Humour	3.9	.92	12	.09	.13	.72
Clear learning outcomes	4.2	.84	5	.59	.17	.19
Direct teaching	3.8	.91	20	.66	-.09	.13
Easily understood packaged knowledge	4.0	.86	9	.54	-.03	.16
Orderly and well-organised process	4.1	.83	7	.64	-.02	.13
Strong control/leadership	3.7	.91	25	.58	.07	-.01
Formally structured debates	2.6	.92	38	.27	.36	-2.5
Discussion based on readings	3.3	.96	31	.30	.52	-.01
Working in small groups	3.3	1.0	30	.23	.26	.31
Not forced to participate	3.0	1.2	35	-1.6	.17	-.18
Doing written exercises	2.9	.95	36	.54	.10	-.01
Students presenting papers	2.7	.98	37	.24	.38	-.42
Material that stretches your thinking	3.8	.85	17	-.01	.59	-.00
Students in control, tutor facilitates	3.0	.88	34	-.11	.53	.15
Lots of debate and argument	3.1	1.0	32	-.10	.64	.06
Entertaining	3.8	1.0	15	-.03	.23	.64
Interesting debate	3.7	.97	23	-.08	.65	.26
Everyone encouraged to participate	3.7	.96	22	0.8	.57	.24
Lots of information from tutor	3.8	.91	16	.63	.14	-.01
Handouts	3.8	1.0	18	.63	-.02	.14
Overheads to work from	3.3	1.1	28	.59	-.08	.13
Clearly explained material	4.3	.77	3	.67	.12	.05
Building blocks to create understanding	4.0	.85	10	.56	.15	.06
Obvious relevance to subject/course	4.4	.77	1	.47	.08	-.04
Open ended discussion	3.8	.85	21	.11	.57	.21
Lots of different ideas	3.9	.91	13	.06	.63	.31
An emotionally safe environment	4.1	.93	6	.12	.24	.51
Interesting topic	4.3	.77	2	.19	.17	.51

Copyright © 2006 L. Ritter and T. Covic: The authors assign to HERDSA and educational non-profit institutions a non-exclusive licence to use this document for personal use and in courses of instruction provided that the article is used in full and this copyright statement is reproduced. The authors also grant a non-exclusive licence to HERDSA to publish this document in full on the World Wide Web (prime sites and mirrors) on CD and in printed form within the HERDSA 2006 conference proceedings. Any other usage is prohibited without the express permission of the authors.