



## Students' perspectives on delivery strategies

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### ABSTRACT

This paper summarises the major findings from a series of qualitative and quantitative research projects conducted by WestOne and the Western Australian Department of Training during 2001 and 2002. These research projects examined student preferences for various delivery strategies. Of particular interest was the strength of the overall demand for flexible delivery methods and differences in delivery preferences among segments of the student population (defined on the basis of primary motivation for training). The research also looked at the relationship between quality of learning, quality of teaching and delivery strategies.

The research has shown that the experience of the majority of vocational education and training (VET) students is dominated by face-to-face teaching and, on the whole, they are fairly satisfied with this traditional and familiar method of delivery. However, there are signs that flexible delivery options are important and valued by certain segments of the student population (eg "career changers", "skill improvers" and the "self-employed"). There are also signs that demand will build in the future as students have more experience with a range of delivery options. Furthermore, experience with alternative delivery methods appears to be associated with higher quality of learning scores, which reflect personal empowerment and confidence in one's ability to learn.

*"...if you don't know who the learners are – their concerns, their ambitions, their background – how can you know if you're making a difference for them..." (ANTA, 2002, p4).*

*"We still seem to be making choices about what to offer flexibly based on 'what is available', 'what is easy' or 'who is available to deliver' – not based on learners' needs." (Manager, TAFE College, survey response, 2002).*

*"[We need] proper, comprehensive research into student needs/wants BEFORE development of resources. My students tell me flexible, off-campus learning is a last resort if they can't access suitable unit/day/time" (Lecturer, TAFE College, survey response, 2002).*

## **Introduction**

While increasing the flexibility of training delivery has been a major policy objective of the VET sector for some time now, it is not an end in itself. The ultimate objective is to make VET more responsive to client needs. Flexible delivery is an important mechanism by which a more client-centred service can be achieved. Yet there is a strong perception that, in our rush to develop flexible learning products and solutions, we have neglected to ask the clients about their needs and preferences.

Despite these perceptions, there is a growing body of Australian research examining various aspects of the learning preferences of VET students (eg Warner, Christie & Choy, 1998; Webb, 1998; James, 1999; Misko, 1999; Smith, 2000a; 2000b, 2001a; 2001b). This is a line of inquiry that has also been pursued in Western Australia by WestOne and the Western Australian Department of Training through a series of qualitative and quantitative research projects examining student preferences for various delivery strategies. This paper summarises the major findings from these research projects. Of particular interest was the strength of the overall demand for flexible delivery methods and differences in delivery preferences among segments of the student population. The research also looked at the relationship between delivery strategies and the quality of learning and teaching.

The research described here has a strong relationship with work done by the Department of Training to develop a new framework for assessing the outcomes of training. This framework includes a methodology for identifying segments of the student population based on the student's primary motivation for undertaking training. This approach to segmentation is described in *Outcomes: Understanding the Vocational Education and Training Market* (Department of Training, 2001) and has been used by the National Centre for Vocational Education Research to produce new insights into TAFE graduates and their outcomes (NCVER, 2002).

## **The research projects**

### *Quantitative research into students' delivery preferences*

Over the last six years, the Department of Training has conducted an annual Student Satisfaction Survey (SSS) to provide both the Department and TAFE Colleges with feedback on their performance. The survey is conducted in September and obtains the views of current students on the quality and relevance of VET services in Western Australia.

A comprehensive analysis of the 2001 SSS data relating to delivery strategies was undertaken and is fully reported in *Student Perspectives on Delivery Strategies: 2001 Student Satisfaction Survey* (WestOne, 2002). The 2001 SSS provided a large and representative sample (N=11,912) of all VET students throughout the State including TAFE Colleges and publicly funded private training providers.

### *Qualitative research into students' delivery preferences*

In 2001, the Department of Training commissioned focus group research to validate earlier quantitative work identifying segments of the student population based on motivations for entering the VET market. Another objective of the research was to identify how students within the different segments seek to receive training and whether their delivery preferences varied depending on their reasons for undertaking study. This research project involved a series of focus group discussions (12) and is fully reported in *Understanding the Vocational Education and Training Segments* (NFO Donovan Research, 2001) and *Knowing the Customers: Report on Focus Group Discussions with Student Segments* (WestOne, 2001).

In 2002, the Department of Training and WestOne commissioned further focus group research aimed at getting a greater understanding of students' views on three delivery strategies: using self-paced learning materials within the classroom, online learning and learning via television. This research project involved a series of six focus groups with metropolitan and regional students (via videoconference) and is fully reported in *Qualitative Research: A Focus on Flexible Learning* (Market Equity, 2002).

### **Key findings**

#### *Delivery preferences*

The 2001 SSS asked respondents to rate the suitability of delivery methods that they had experienced on a scale of 1 to 7 where 1 was "not suitable" and 7 was "very suitable". Respondents were also asked to indicate if they had *not* experienced the delivery method.

The table below shows delivery strategies rank ordered according to students' ratings of the suitability of each delivery strategy. For each delivery strategy, it shows the mean suitability rating and the percent of the respondents who rated the delivery strategy as "suitable" (ratings of 5-7).

The majority of students found face-to-face teaching (90%), workplace learning (83%), self-paced learning in a timetabled class (71%), unscheduled self-paced learning (68%), correspondence studies (67%) and online learning (58%) to be suitable delivery strategies. Less than 50% of students found the following delivery strategies suitable: video/telephone conference (46%) and television (34%).

**Table 1 Suitability ratings for delivery strategies, 2001 SSS**

<b>Delivery strategy</b>	<b>N</b>	<b>Mean</b>	<b>% Suitable</b>
		<b>1=not suitable 7=very suitable</b>	<b>Ratings of 5-7</b>
Face-to-face teaching	8835	6.11	90%
Workplace learning or work placement	3696	5.84	83%
Using self-paced learning materials during timetabled classes	2499	5.24	71%
Studying on-campus at my own rate, without attending timetabled classes (self-paced learning)	2448	5.19	68%
Correspondence or external studies	2556	5.09	67%
Online learning through the Internet	1381	4.71	58%
Video/telephone conference	525	4.10	46%
Television at home	483	3.64	34%

Weighted sample, cases filtered

These results from the 2001 SSS were confirmed through both focus group research projects where the majority of students expressed a clear preference for scheduled, classroom-based learning with ready access to a lecturer or practical experience in a workplace or simulated workplace.

The focus groups also showed that students tend to express a preference for those delivery strategies with which they are most familiar. Those students who had experienced flexible learning options such as online learning could see the advantages and would be willing to do it again. One student who had undertaken all her secondary school learning through the School of Isolated and Distance Education said that, for her, learning meant working at her own pace through printed learning resources and that she loved to learn this way.

The implication of this finding is that we can expect the pattern of student preferences observed in 2001 to change over time. As students gain experience in flexible learning options (in schools, VET and universities), especially those delivery strategies associated with new learning technologies, it is likely that they will express higher levels of preference for these delivery strategies.

*Delivery preferences of client segments*

The 2001 SSS data makes it possible to develop profiles of respondents who rated a particular delivery strategy as suitable or unsuitable. These profiles could assist in the appropriate targeting of delivery strategies. For example, using the client segments developed by the Department of Training, the table below shows the percent of each client segment that rated a particular delivery method as “suitable”. The areas highlighted in green show where the percent of suitable ratings for the segment is more than 2% higher than the percent of suitable ratings for the total sample. These green areas, therefore, show the client groups *most predisposed* to a particular delivery strategy. Conversely, the red areas show the client groups *least predisposed* to a particular delivery strategy.

**Table 2 Percent of “suitable” ratings by client segments**

Delivery strategy	Total	Client segments						
		Labour market entrant	Career changer	Skill improver	Bridger	Further education	Self employed	App/trainee
Face-to-face teaching*	90%	89%	92%	90%	91%	93%	91%	86%
Workplace learning*	83%	90%	80%	83%	75%	79%	77%	85%
Self-paced learning materials, scheduled	71%	72%	71%	75%	69%	64%	70%	76%
On-campus, self-paced learning, unscheduled*	68%	64%	66%	75%	64%	64%	71%	74%
Correspondence/ external learning	67%	64%	71%	68%	62%	66%	70%	62%
Online learning*	58%	58%	63%	71%	58%	50%	59%	34%
Video or telephone conference	46%	47%	41%	50%	55%	38%	38%	34%
Television learning	34%	31%	32%	28%	32%	27%	43%	31%

\*Significant difference between client segments, Chi square significance level less than 0.005

In general, the results of this analysis confirmed the findings from the focus group research. The client groups *least* open to flexible delivery methods were the “labour market entrants” and “further education” clients with “labour market entrants” showing a stronger preference for workplace learning than other groups and “further education” clients showing a stronger preference for face-to-face learning than other groups. The client segments that seemed *most* open to flexible learning options were the “career changers”, “skill improvers” and the “self-employed”.

In terms of client segments, the pattern of preferred learning styles can be summarised as follows:

*Labour market entrants*

**Description:** The segment comprises youth up to the age of 24 seeking their first skilled job (excluding apprentices and trainees). It includes many school leavers.

**Delivery preferences:** This group has a strong preference for face-to-face delivery or workplace learning. Although a third expressed an interest in independent study options, they have less interest than other groups in self-paced learning, correspondence studies and television learning because they feel they need face-to-face delivery to provide structure and maintain motivation. This group shows a strong preference for daytime classes.

### *Career changers*

Description: This segment of students is seeking to change their career or to start a career in a skilled occupation later in life. Women seeking a career after family responsibilities are an important part of the latter group. Students in this segment are more likely to be mature-aged.

Delivery preferences: This group has a preference for face-to-face delivery. They also show a higher than average interest in correspondence/external learning and online learning because of work and family commitments. This group shows a range of preferences with respect to class times.

### *Skill improvers*

Description: This group of students is seeking training to update or improve their skills for their existing jobs or occupations or to seek a promotion in their existing careers. It covers most work-based and employer-supported training (other than apprentices and trainees).

Delivery preferences: Similar to other groups, skill improvers show a preference for face-to-face delivery. They also show a higher than average interest in self-paced learning (both on and off-campus), online learning and video/telephone conference because of work and family commitments. They tend to prefer classes held in the evenings and external studies.

### *Bridgers*

Description: This group is studying to gain entry to another course. Most are youth seeking entry to University or a higher level TAFE course and they have a vocational outcome as their ultimate aim.

Delivery preferences: This group shows one of the most conservative patterns of learning preferences. They show a strong preference for face-to-face teaching and lower than normal preference for most other learning styles. They have a strong preference for classes scheduled during school hours.

### *Further education*

Description: This segment includes people seeking to further their education and to acquire skills though not necessarily directly for their jobs or careers. It includes two different groups: those studying for stimulation and love of learning and those studying to overcome self-perceived deficits in their education or skills.

Delivery preferences: This group has the strongest preference for face-to-face delivery of all the client segments. They have less interest than other client segments in all other modes of delivery because they love the social, intellectual and creative stimulation provided by the classroom learning environment. They also show a strong preference for evening classes.

### *Self-employed*

Description: This group's primary motivation is to develop skills to conduct their own business or to improve their skills in relation to their current business. The group is likely to be larger than shown as students in other segments may also see their training as leading to self-employment.

Delivery preferences: While the majority of this group rate face-to-face teaching as suitable, over a third would like to see more independent study options available because of time pressures. The group shows a stronger than average interest in on-campus self-paced learning, correspondence/external learning and television learning. This group prefers evening classes.

### *Apprentices and trainees*

Description: Apprentices and trainees have a contract of training with their employer who provides much and sometimes all of their training on-the-job. Apprenticeships usually have three to four year terms and are mainly undertaken by young people. Traineeships are usually for around a year and attract a wider age range although young people predominate.

Delivery preferences: While face-to-face teaching still enjoys high suitability ratings amongst this group, the group is less predisposed to face-to-face teaching than other client segments. This group shows higher than average interest in self-paced learning (both scheduled and unscheduled) probably because of the prevalence of this delivery mode in trade training. There is a strong preference for daytime classes.

### *Preference for off-campus learning options*

The 2001 SSS asked students to rate the extent to which they agreed with the statement: "I would have liked to have done more of my course at home or work by Internet, television or correspondence". While 51% of students did not agree with the statement, 35% of students expressed a preference for more independent learning options. The level of demand was higher than average among the 25-44 age group (37%), trainees (40%) and part-time students undertaking three or more modules (39%). There was also a greater demand for independent learning options among those students who had experienced more delivery strategies. These results were statistically significant with Chi square significance levels of less than 0.005.

### *Quality of learning and teaching*

The sample of respondents was divided into roughly three equal groups by the number of delivery strategies rated. The mean ratings for quality of learning (composite score), quality of teaching (composite score) and overall satisfaction were compared for each of these groups. The table below shows that:

- The mean quality of learning score increased as the number of delivery strategies rated increased and the difference between the groups was statistically significant.
- The mean quality of teaching score decreased as the number of delivery strategies rated increased and the difference between the groups was statistically significant.

- With respect to overall satisfaction scores (where 1=very satisfied and 5=very dissatisfied), the difference among the groups was not statistically significant.

**Table 3 Quality of learning by number of delivery strategies**

Number of delivery strategies	Mean quality of learning*	N	Mean quality of teaching*	N	Mean overall satisfaction	N
1	75.19	3578	82.13	3519	1.82	3669
2	77.13	2845	81.04	2805	1.84	2866
3 or more	78.47	3174	79.77	3146	1.85	3185
<b>Total</b>	<b>76.85</b>	<b>9597</b>	<b>81.02</b>	<b>9470</b>	<b>1.84</b>	<b>9720</b>

\*Significant difference between groups, significance level less than 0.005 for the F statistic (ANOVA)

It is interesting that student perceptions of the quality of learning *increases* as the number of delivery strategies experienced increases whereas perceptions of the quality of teaching has an inverse relationship with number of delivery strategies (ie *decreases* as the number of delivery strategies increases).

A closer look at the items that make up the quality of learning score can assist with the interpretation of this relationship. Respondents were asked to indicate whether they agreed or disagreed with the following statements:

- My training has made me more confident about achieving my goals.
- As a result of my training, I am more confident in my ability to learn.
- My training has helped me think about new opportunities.
- I am learning the skills I wanted to learn from my course.

Respondents' ratings increased for each of these items as the number of delivery strategies increased. This relationship was statistically significant for all items except the fourth item. As the first three items suggest self-confidence, empowerment and independence, it is reasonable to conclude that the experience of a number of different delivery strategies is *associated* with these feelings of confidence in oneself.

With respect to quality of teaching, the items making up the quality of teaching score included the following:

My lecturers:

- Had thorough knowledge of the subject content.
- Provided opportunities to ask questions and obtain clarification.
- Treated me with respect.
- Understood my learning needs.
- Communicated information effectively on the subject content.
- Made the subject as interesting as possible.
- Displayed a high level of teaching skills.

Respondent's ratings *decreased* for each of these items as the number of delivery strategies increased. This relationship was statistically significant for items (a), (b), (c) and (f). These items are strongly related to the behaviour and performance of the teacher in front of a class. We also know that the majority of students who

experienced one delivery strategy only experienced face-to-face teaching. Therefore, the most likely explanation for the observed relationship is that student perceptions of the quality of teaching are strongly linked to face-to-face teaching.

The fact that quality of teaching and quality of learning behaved in opposite directions in this analysis, serves to remind us that teaching and learning are not synonymous and that this will become increasingly apparent as alternative delivery modes become more prevalent.

### **Strategic implications**

- About two-thirds of the existing student population prefer the traditional modes of delivery involving scheduled classes and face-to-face contact with a lecturer or workplace instructor. Labour market entrants, apprentices, “bridgers” and the “further education” client segments are strongly associated with this group. Students in this group may respond positively to the use of a variety of learning resources (eg self-paced learning materials, online resources, video) within the classroom setting.
- About one-third of the existing student population have an interest in the increased use of independent, off-campus learning modes such as correspondence learning, online learning, video/telephone conference and learning via television. This group is associated with the 25-44 age cohort, trainees and part-time students studying three or more modules in a year. This level of interest is evident for all client groups except the “further education” and apprentice groups.
- The pattern of student preferences observed in 2001 is likely to change over time. As students gain more experience with flexible delivery strategies the levels of acceptance are likely to increase.
- This research suggests that a major thrust of the State’s investment in flexible delivery should be on the use of a variety of learning resources (eg self-paced learning materials, online resources, and television/video) within the classroom. With this strategy, the VET sector can build the *future* market for independent, off-campus learning.
- This research also suggests that there is *currently* a significant level of demand for independent study options with about one-third of students agreeing that they would have liked to do more of their course at home or at work by Internet, television or correspondence. Turning this level of demand into successful client outcomes will require accurate identification and targeting of the student groups with strong needs/preferences for flexible delivery options.

### **Conclusions**

The 2001 SSS data provides a useful “snapshot” of students’ current views on and experiences with various delivery strategies. The overall picture is that the experience of the majority of VET students is dominated by face-to-face teaching and, on the whole, they are fairly satisfied with this traditional and familiar method of delivery.

In the background of the 2001 snapshot are signs that alternative delivery options are important and valued by certain segments of the population of VET students (eg “career changers”, “skill improvers” and the “self-employed”). There are also signs that demand will build in the future as students have more experience with a range of delivery options. Furthermore, experience with alternative delivery methods appears to be associated with higher quality of learning scores, which reflect personal empowerment and confidence in one’s own ability to learn.

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