

TVEI Residential Experience — Questions for Entrepreneurs

Jim Flood and Howard Denton
Loughborough University

'What time is the lecture on nutrition?'

'Who went to the demonstration on vacuum forming — and when are we going to be briefed about it?'

'We have to get someone on the airport catering visit. Where is the signing up sheet?'

'Let's find out if we can share the cost of a jar of mayonnaise with ACME CATERING.'

'Look, we have to have this mould made by 3 o'clock this afternoon.'

'How much profit should we be making?'

Questions, decisions, deadlines; part of the residential experience of a group of Bedfordshire 16+ students drawn from sixth form centres and an FE college.

Meals on Wheels

The target was to undertake a feasibility study on producing airline type meals for motorway express coaches. Would these sell? How much could they be produced for? How could they be packaged and stored? What use can be made of computer modelling?

Questions for the entrepreneur of the 80s or 90s.

The course which ran over a week in July this year is the third in a series developed by the Department of Design and Technology at Loughborough University, working in close co-operation with Local Education Authorities. The brief was to develop a meaningful residential experience within the aims and spirit of the Technical and Vocational Education Initiative.

The experience including working and making decisions in groups, communicating, designing and making models and prototypes, serious consideration of the cost of materials and manufacture and as realistic an assessment of the results as possible.

Day 1

'Find out which group you are in!'

'No you can't be with friends, in real life you find yourself working initially with strangers.'

'Get to know each other by discussing what the name of your company should be.'

'Why can only one person from our company go to a lecture or demonstration?' . . .

'Well, first of all they are geared for small groups and secondly the aim is to develop the skills of communicating to the rest of your group what has been learned.'

'But John forgot to take notes . . .!'

'Well tough, life tends to be like that, can you find the information from another source?'

Day 2

'Did you realise that an airline meal costs less than 40p? How can we compete with that?'

'I've put the costs of the materials and wages into the computer and based on projected sales we make a loss of £10,000 in the first year.'

'Can we take some time off to go swimming?'

Day 3

'The mould isn't working. The plastic wrinkles.'

'The tray is too floppy.'

'I don't think that logo reflects the image of our company.'

'Alan was supposed to have the menu done by lunchtime.'

'What do you mean Sainsburys has sold out of pate, what time does Tesco close?'

Day 4

'Have you seen what EXPRESS FOODS have produced, it's brill, we might as well give up now.'

'So what if it does look awful, it tastes good.'

'This will never be ready on time.'

Day 5

'I've spent £5,000 on COACH CATERING's product'. 'So we haven't sold that many — but look at the profit we are making!' 'Yeah, we came third on total profits but if it was for real we would have done better!'

Results

The weeks activities were assessed in a number of ways:

a. The 'market place' result. The buyers, were in fact, assessing their peers' work and in this they were

Decision making



remarkably honest and careful. The results, as indicated above, were entered into the computer for final analysis.

b. The work was marked by University staff in the conventional manner.

c. Students completed a questionnaire in order to assess their own performance and to give staff feedback on which to match the objectives with the achievements. This was done in a carefully controlled manner in order to ensure confidentiality; results were remarkably forthright and of great value.

Control and Forecasting

An interesting feature of the week's experience was the use of a special computer simulation package, developed at the University, and designed to be run in an INTERACTIVE manner with the week's work. This had been developed based on the experience staff had gained running the two previous courses. The programme had three main functions:

a. To control the whole experience. This was done by the computer requesting information at various times during the week such as materials costs, rates of pay etc. By mid week each team made an appointment to see a 'bank manager' (university staff), in order to raise capital on the basis of their initial prototypes. On the basis of the team's performance and professionalism the bank manger allocated funds from a finite source. Subroutines predicted overheads. For example rates were estimated on the basis of complexity of product and intended production volume giving, therefore, the size of facility necessary to do the job. All the data together made a realistic record of small company's operations.

b. The programme could also offer teams forecasts of sales and performance based on data the team entered and could experiment with. In this way teams were able to see predictions of performance and so make more informed decisions in their work.

c. A secret teacher code enabled staff

to alter material prices or availability so simulating the effects of strikes or supply problems. These could be announced as 'BBC NEWS' items and companies would have to react accordingly.

Conclusion

The results of the formal techniques and more informal feedback indicated that the week was a great success. Comments from students were highly favourable and indicated that this took them far closer to working in the real world than was possible with the conventional school time table and curriculum. The fact that the course was residential will, of course, have made this far more possible than had it been run in a school, however, it is felt that there are still many lessons for schools from this course.

The experience was also successful in enabling students to experience some situations which do not fit into the neat boxes of the curriculum such as: the need to gel quickly as a team and work with synergy; the experience of responsibility in that each member was relying on the others; and the need for positive attitudes in industry and commerce rather than clock watching which has its genesis in the school lesson bell.

Several visitors commented on the high work rate which was evident during the week. This was far in excess of that normally found in schools and can be traced to group work and the development of the 'simulated atmosphere' during the week. This is not easily done in a normal school due to the constant interruption of the timetable. As students began to 'live' the simulation they gained more from it, it began to feed itself and it was clear that they lived it, and gained from it, with an intensity not often seen in schools before.

For a more detailed account of this course and information about the computer programme write to Howard Denton, Department of Design and Technology, Loughborough University, Leicestershire LE11 3TU.



Decision making