

Open Forum

The programme allowed two opportunities for the audience to air their views on the keynote addresses and related topics. Each session was chaired by Professor John Coolahan of Maynooth College (NUIM).

Such fora are by their nature kaleidoscopic the range and focus of their contributions. This edited summary of the key points proposes to capture the flavour of the sessions while not claiming to be a definitive record.

Gender Issues

- Technological education should be seen as a right rather than as a privilege. Girls must be included in such provision and should be welcomed into the subject area. Girls may not be interested in traditional technological areas of employment. They may be interested in new areas of employment which are being provided by the newer technologies.
- The issue of gender balance and inclusion was seen to be complex. Apparently women comprise 35% of the elected members of the parliament of Finland. This positive rate of representation is not matched in other areas of society.
- Reference was made to research evidence from psychology on the learning process for males and females. This suggested that females may perform better in 2D and related crafts such as sewing and weaving. Males may perform better in 3D and related crafts such as wood and metalwork. As the synaptic junctions, which determine how the brain operates, continue to form in adolescence (while the student is pursuing second level education) it may be possible to train the brain to improve performance in both 2D and 3D. The quality of practical work done by girls in subjects such as Technology seems to suggest that they are well able to meet and exceed the standards set by their male peers.

Liberal vs. Vocational

- An unreal distinction has been drawn between the liberal and the vocational aspects of the education of the person. In the past the structures of our education system enforced this divide. We now have the opportunity to reintegrate them in a manner characteristic of human endeavour.

Technological Education

- The present rate (up to 25%) of participation in technological education subjects is inadequate. There must be access across the curriculum for all students. The English education system encourages such access for all students. It supports this priority by encouraging education links with industry.

Information Technology

- Information Technology (IT) was mentioned as the “engine of growth” of the modern Irish economy. Is there a need for an IT subject at second level education?

The Craft Tradition

- The craft tradition was seen to be important. While the syllabi of the practical or craft subjects has changed, and they should change, it is important to retain the skills which contribute to the “all roundedness” of education. Curriculum change should not lead to a de-skilling of subjects.

Uptake of Technology Subjects

- Concern was expressed regarding the uptake of technology subjects. Leaving Certificate Engineering was cited as an example. This subject is onerous and time consuming for the teacher, comprising as it does practical work, project work and terminal exam. The recommended class size for such subject is 24 pupils. The present teacher pupil ratio of 19:1 makes such classes unattractive to the timetabler. There is pressure therefore to eliminate the smaller classes / subjects in the interests of the overall staff economy of the school.

Science and Technology

- A significant number of qualified science teachers are involved in the teaching of the subject Technology at Junior Cycle. Science and Technology can complement each other at Leaving Certificate (LC). There is national concern about the fall in numbers taking science subjects at LC. The development of Technology at LC could help to offset this decline. Such development is even more urgent in girls' schools where there is no continuation path from JC Technology at present.

Leaving Certificate Technology ICD

- The 4 new LC syllabi were widely welcomed. Implementation should begin as soon as possible. The lessons of JC Technology should be learned. ICD preparation should begin immediately.

Multiple Subjects and Teacher Training

- The work of the 3 subject associations in promoting their subjects and bringing about this conference was acknowledged. The new syllabi propose that there will be 4 separate technological subjects on the LC curriculum. This will pose serious complications for the teacher trainers. There could be as many as 6 combinations of subjects. How will the teacher trainers cope with this complexity?
- Can we afford the luxury of 4 subjects to meet the aims of technological education? The ICD unit and the DES should concentrate on more than just the

content of syllabi. They should address the full range of issues in curriculum support.

Government Policy

- Mention was made of the Minister for Education's concern that more students should study Technology. Nonetheless subjects should also enjoy public and popular support. This will not be achieved if Technology is fragmented across 4 subjects. Integration is essential.

Summary

In a comprehensive summary of the open for a discussions, John Coolahan¹ drew attention to the following:

- He endorsed the initiative in convening the conference which was timely.
- While much has been achieved in the development of technological subjects we do need to set our sights higher for the future.
- There has been a trend towards dropping technological subjects which needs to be redressed. Technological subjects are central to the curriculum.
- The contribution of the Christian Brothers in supporting and promoting technological education was acknowledged.
- Participation by girls in technology subjects is still very low. In the subject Technology participation by girls has reached 30%. There is still much to be done to address the issue of gender balance.
- There is need for research into the value to the individual student of technological subjects. Student attitudes and perceptions of technology need to be researched.
- Information Technology should be explored as a potential subject area in its own right.
- The value of incorporating materials into the curriculum was emphasised.
- The linkage of Science and Technology was stressed.
- The urgency of the introduction of the 4 new technological subject syllabi was mentioned repeatedly.
- Much discussion centred on the need to integrate technology subject areas in the curriculum. Can we afford the luxury of 4 separate technology subjects at Leaving Certificate level? Is the curriculum not in danger of being overloaded?

¹ Note: John Coolahan in his role as chairman of the open fora summarised the proceedings. This summary does not necessarily reflect his views on the issues raised.

Partnership in Technological Education

- The content of the Technical Drawing syllabus was discussed along with the proposal to change the name of the subject to “Architectural Technology”.
- The question of implementing the new syllabi raised. The consensus of the conference seemed to be that it a matter of urgent concern to all.
- The risk of overloading the curriculum needs to be calculated.