Thinking skills techniques can really make a difference to students' achievement

…but only if students learn with each other, is the message from a review of research in the post-16 sector. 'Thinking skills' approaches to learning require students to plan, describe and evaluate their thinking and learning. They become aware of their thinking and reasoning, developing knowledge and control of their own approach to learning (metacognition). Developing the concept-formation, enquiry and reasoning skills encourages learners to be more independent, and increase their ability to learn collaboratively with their peers. Well-designed peer-interaction activities are key. Students are set tasks which encourage them to "construct, test and justify knowledge" together. But there is also evidence that the vocational learning environment doesn't always create the right conditions for developing thinking skills. Problems the researchers identified related to the readiness of the teacher and of the students, the design and content of courses, the learning environment and institutional support.

The type of peer interaction in thinking skills approach is distinctive from the more commonly used co-operative approaches to learning, where members of a team pool their information and report back. Peer interaction for developing thinking skills involves learners tackling problems that can only be solved together. Examples of peer interaction which successfully enhanced learning ranged from:

- developing reasoning through repeated engagement in structured peer discussion on capital punishment

– to –

- chemistry "process workshops" – where students worked in teams on activities that involved information processing, guided discovery exercises, problem-solving, reflection on learning and assessment of performance.

Why not revisit the course design in your vocational field to identify opportunities for introducing thinking skills?

Moseley, D., Baumfield, V., Higgins, S., Elliott, J., Gregson, M, et al. (2004) *Thinking skill frameworks for post-16 learners: an evaluation* LSDA and Livingston, K., Soden, R., Kirkwood, M. (2004) *Post-16 Pedagogy; Thinking Skills: an evaluation* LSDA: www.lsrc.ac.uk/publications/index.asp