Quality
Improvement
Agency

QIA

Teaching and Learning Programme

Information technology

Activity 4: Going deeper

This activity uses the jigsaw method to enable learners to deepen their learning, followed by a team task using graphic organisers. Approaches such as these help learners develop their personal learning and thinking skills and are an effective way of helping them master complex information. Once again, peer explaining also plays a key role.
Learners start in groups, with each group studying a different topic.

a. Use of databases within the ambulance service.
b. Use of GIS and GPS within the ambulance service.
c. Use of telecoms within the ambulance service.
d. Resilience – how the ambulance service plans in advance how they will deal with problems.
e. The role of the IT team within the ambulance service.

Each group member then moves on and shares their knowledge with others. Finally, they return to their regular co-operative learning teams for a task using graphic organisers.

This activity demonstrates the co-operative learning principle of positive interdependence ('we sink or swim together'). You can find out more about this principle within the Co-operative learning area of the IT resources.

The activity is flexible. You do not have to cover all five topics and the activity works with various-sized groups. It can even be adapted for 'virtual' discussions, with learners in different locations sharing their knowledge.

Learning objectives

Learners should be able to:

• identify key points about a topic
• explain the topic to peers
• improve their listening skills and discussion skills
• apply group processing skills without the teacher facilitating.

Resources required

A means of showing **The South Western Ambulance Service – multimedia presentation** for each topic on individual computers, or the PDF versions of the presentations: **Sheet 2.1 – 2.6 Ambulance service storyboards** (included in separate documents to these guidance notes.)

• You will need to view this material in advance to decide whether you want to cover all the topics.
• A set of pictures showing graphic organisers for each team (available within the Co-operative learning area of the IT resources).

- A way for teams to create their own graphic organisers, either manually or electronically.
- A set of role cards (optional) – available within the Co-operative learning area of the IT resources.

Starting points

Previous activities (1, 2 and 3) familiarise learners with the work of the South Western Ambulance Service and build up their confidence to work co-operatively.

The **Using graphic organisers** activity within the Co-operative learning area of the IT resources forms a useful prior activity, especially for less confident learners.

Suggested approach

Stage 1: Organising groups and allocating topics

If you are going to cover all five topics, learners need to be in groups of five. If you are covering four topics, they need to be in groups of four, and so on. If your total group of learners is not divisible by the number of topics, invite some learners to work in pairs until stage four.

Explain that each group will investigate a topic, then share their knowledge with everyone else. In other words, they will become the experts.

The topics are listed below.

a. Use of databases within the ambulance service.
b. Use of GIS and GPS within the ambulance service.
c. Use of telecoms within the ambulance service.
d. Resilience – how the ambulance service plans in advance how they will deal with problems.
e. The role of the IT team within the ambulance service.

Stage 2: Researching the topic and agreeing key points

Working individually or in pairs, learners study the multimedia presentation on their allocated topic, noting down key points. Alternatively, they could use the summary PDF storyboards, available in the Downloads tab of the storyboard player.

Each group then meets to compare notes and agrees a set of bullet points on their topic. Everyone notes these down, as they will be used as a prompt sheet for the next stage.

You may like to give guidance on how many bullet points to write. Or you may set a time limit for the next stage and use this to guide the groups on how much material to prepare: "During the jigsaw stage you will have just three minutes to teach the others about your topic."

Stage 3: Jigsaw

Learners now form new groups, ensuring there is one 'expert' (or pair of experts) for each topic in the group.

The experts explain their topic to the group using their bullet points as a prompt sheet. Learners working as a pair can divide up the bullet points and do a 'double act'. Allow additional time at this stage for learners to question the experts and discuss each topic.

Stage 4: Team task using graphic organisers

Learners now return to their regular co-operative learning teams. Give each team the pictures of graphic organisers. They will also need a means of producing completed graphic organisers. This can be done electronically or on large sheets of paper.

Set the task to suit your learners. You could choose either an open-ended, challenging task:

> "Take each topic you learned about in the jigsaw. Put the information into a suitable graphic organiser. Feel free to devise your own graphic organisers as well as using the ones on the cards."

Or more defined, less challenging tasks:

> "Use the T-column. List the different databases used by the ambulance service on the left. Say what they are used for on the right."
>
> "Use the idea cake. Label each segment with a problem that the ambulance service has to deal with. You can have as many segments as you like."
>
> "Use the sunshine wheel. Put 'The IT Team' in the middle. Label the spokes with the things the IT team does."

Whatever the task, now may be the right time to allow teams the freedom to decide how to organise their work and also allocate team roles, if they wish. Have the team role cards handy, in case they need them.

Assessment for learning

Observe the teams at work. You will not only find out how much they have learned about the topics, you will also notice things about their team work that may help you guide them during group processing.

Stage 5: Group processing

By now your learners should have a good grasp of what is involved in group processing and be ready to run their own group processing discussions, with minimal intervention from the teacher. You might like to introduce the use of the following group processing prompts, as these provide a clear focus to keep learners on track during their discussions.

Learners do not need to address all of the prompts, although number six should always be on the agenda.

Processing prompts

1. Three things the team did well in working together...
2. Our team is really good at...
3. Words describing our team are...
4. Actions that helped the team were...
5. Next time we will be better at...
6. One change we need to make to our ground rules is ...