



## W&P Assessment and Training Centre

### Developing initial assessment and awareness of numeracy in Care

#### Introduction

W&P's aim is to provide specialist tailored training for the care sector with emphasis on meeting the needs of candidates and employers in the care organisations.

W&P is accredited to provide NVQs Level 2, 3 and 4 in Health and Social Care and Management awards. In addition we provide mandatory and bespoke training both in-house and via distance learning. We also provide awards for assessors, internal verifiers and teachers. We are a CRB umbrella body for any industry.

Our target market includes care establishments both with and without nursing, domiciliary agencies, live-in care, and care sector recruitment agencies.

#### What we did

We already have a useful method for initial assessment for literacy and feel it is easier to integrate literacy development into the assessment practices we use to assess at all levels. Integrating numeracy is more challenging as workers in Health and Social Care often do not see the relevance of numeracy in their practice. We wanted to explore, not only how numeracy can be recognised as essential in the supervisor/manager role in a care setting but also how staff can be supported to develop their numeracy, not only through embedding teaching and learning in the achievement of an NVQ but also through effective supervision.

We brought together a small group of staff – an NVQ Level 4 candidate, a manager, a training officer and an assessor, who had all expressed a wish to develop their own numeracy skills. Three workshops, with independent work in between were used to help the participants to consider their own numeracy skills and confidence and prepare for numeracy accreditation. These staff also identified the numeracy skills required in their work setting and developed tools to illustrate and identify these tasks as part of an informal assessment/engagement process.

#### Workshop 1

This workshop was used to

- explore individual perceptions of numeracy/maths, identify knowledge, understanding and skills already held, and identify future learning needs
- explore, discuss and complete numeracy test paper questions to identify own levels of targeted achievement and to establish understanding of the requirements of the test
- begin to identify the numeracy/maths that exists in care practice.

Between Workshops 1 and 2 all were encouraged to complete paper-based and IT-based test papers at the level of their choice not only to increase their knowledge, understanding and skills but also to increase their confidence.

## **Workshop 2**

This workshop proved very useful for all participants to raise their knowledge, understanding and skills in numeracy/maths, which included recognition of the details of the numeracy core curriculum. They also gained skills and knowledge needed to explore the test questions to extract the essential maths needed to complete for success. It was agreed that two participants would aim to achieve Level 1 and two to achieve Level 2.

Between Workshops 2 and 3 all participants were encouraged to continue their completion of IT-based test papers through the 'Move On' website and to access the BBC Skillswise website to extend their specific maths knowledge, skills and understanding. They were also encouraged to obtain copies of the Embedding Skills for Life materials for Health and Social Care.

## **Workshop 3**

This workshop focused on identifying and exploring the maths that is needed to function competently in a care setting. Doing this work led one member of the group to comment: 'Maybe this has contributed to many of the accidents and mistakes that have been made and we never realised.'

## **Resources produced**

Pictures of a bathroom, bedroom and dining room were produced and used to illustrate the common tasks occurring in each room which required maths skills. Examples included numeracy in the dining room (portions in diet) and toileting (monitoring of fluids), bathing (temperature) and hygiene, going to bed (managing space and time) and getting up to include medication where appropriate (measures and estimates). A list of the numeracy skills used for the tasks in each room was produced.

## **The responses of the group members**

**Manager** – She began the project believing that 'there isn't much maths in care'. Through the sessions she gained not only the knowledge that maths is very relevant in the care setting but also recognised that she has mathematical abilities that she had not recognised before. Put in context she realised how much she would need to identify the resistance to maths in her staff and consider ways and means to improve the standard. She observed the impact of initial assessment on the staff who had recently sat a test as part of training and identified that they had generally taken this in their stride – she then considered whether this test would be a barrier to others taking up the wider training opportunities.

**Training Manager** – Although recognising that there is numeracy in care, through the project this participant recognised the source of her resistance to maths. Having identified this she enjoyed the process of uncovering what she did know and could do. The test papers proved to be addictive and she endeavoured to achieve a 100% success rate. Gradually she recognised that her greatest barrier to achievement was not her mathematical ability but more her attention to detail when reading the questions, extracting the necessary information and then completing fully the calculations etc required. This increase in awareness caused her to consider the feedback she had gained from staff members in her organisation and cited an example of 'grown women have cried because of the maths test they had to sit'.

**Care and Skills for Life teacher and Assessor** – Already confident in the delivery of literacy in an NVQ Level 2 care this participant recognised how much a learner’s literacy level can affect their ability of to access numeracy problems and tests. Unpicking the questions gave this participant the opportunity to recognise what support future learners may need. The activity looking at what was already known, understood and could do reinforced that she already had a good grasp of maths and her confidence increased, resulting in her preparing to sit the Level 2 test.

**Senior Care Worker and NVQ Level 4 candidate** – Having come to England from a very different culture this participant’s experience was that things are done differently here. This project enabled her to identify how her knowledge, understanding and skills could be transferred into the context in which she now works. Analysing the activities in the rooms in the care settings proved to be a revelation and has steeply increased her commitment to promoting and supporting the acquisition of maths knowledge, understanding and skills.

## **Benefits**

We have felt two key benefits from our project:

1) Four key people delivering care are preparing to sit their numeracy tests at either Level 1 or 2. All had little if any confidence in their mathematical ability. This project has increased their knowledge, understanding, skills and confidence in the application of numeracy especially at work. They also had conflicting views on the need for numeracy in care. They will now be ambassadors for numeracy development with first-hand knowledge and experience of the tests. With their increased awareness of the context of numeracy in care they should also be in a strong position to introduce and develop functional skill achievement.

2) We produced an analysis of three rooms where care takes place. We began with a pictorial representation of a generic bedroom, bathroom with toilet and dining room. The working pictures were sketches produced by the participants – these have been developed using Microsoft clip art into crude pictorial representations with room related images.

Using the group’s extensive knowledge, understanding and experience in care we looked at the activities that take place in those settings. Using the numeracy core curriculum, we then linked the skills, knowledge and understanding in maths that would be needed to deliver effective and appropriate care. From this we then considered which aspects of care related to which level of award namely Level 2, 3 or 4. This showed that care staff working at Level 2 required more numeracy than any of us had first considered.

## **Lessons learnt**

Low numeracy skills have the potential to undermine an extensive number of activities which are core to the delivery of appropriate and effective care. These appear to be mainly based in the ‘common measure’ aspect of the core curriculum. Probability should also be recognised as a mathematical concept essential in care in the light of its relationship to risk assessments.

Initial assessment of numeracy for adults working in care can be intimidating, distressing and at worst contributing to the exclusion of certain groups in further training and development

opportunities. Given the opportunity to discuss the emotions provoked when looking at or talking about maths, the next step to actually doing maths is less intimidating.

Care staff working at Level 2 require a level of numeracy that must be recognised, explored and promoted. Looking at the charts in the resources, the amount of numeracy needed at HealthCare Assistant level (Level 2) was a surprise for the whole group. Many care workers may be able to complete some simple maths tasks but it is essential to ensure that they understand the concepts behind the tasks so that their skills are transferable.

Care staff in a supervisory/ management role may not recognise how much maths is involved not only in their own role but also in all care roles. There is little recognition of the need to consider poor numeracy when analysing data related to accidents and mistakes.

Numeracy delivered deeply embedded into care practice can promote participation, confidence and even enthusiasm. The materials available are excellent to deliver teaching and learning but each person within the workplace must be able to identify, support and confirm correct numeracy practice.

## **Next steps**

Our intention is to use the information and materials we have developed to incorporate numeracy assessment at induction using a learner-friendly approach. The pictures can be used with individuals or small groups. The list of care activities linked to the numeracy core curriculum can be used to facilitate discussion and promote the concept that learners can explore and improve their numeracy while they are working in care. They can be supported to identify the maths they already have and participate in a full assessment of the learning they need.

This information and these materials can also be used to promote discussion at any level and with anyone involved in the care sector e.g. employers, managers, staff, candidates, learners and maybe even funders.

To complete the project we will develop the W&P LMS to provide additional maths materials and tests for our candidates to increase knowledge, understanding and skills. We will also extend the W&P Associates community of practice to ensure that numeracy is seen as essential in care work. Identifying and addressing numeracy learning needs will be promoted to become common practice in assessment at all levels. Finally we will develop W&P's capacity to deliver on demand e-based testing for ease and speed of access to completion and achievement.

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