

Numeracy challenges and issues: what people are saying

■ Noyona Chanda, Head of Numeracy Division, Assistant Director of LLU+, London South Bank University

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In the December 2007 edition of *Update* we described how we were gathering information about numeracy across the range of programme activity and project partners – current position, perceptions, issues and challenges. A few months on, the emerging evidence offers a few good news stories, but sadly also more of what has been the stuff of anecdote over the last 20 years of adult numeracy provision and practice.

We have consulted widely – through face-to-face discussion in focus groups, questionnaires at relevant events, a national email questionnaire, representative agencies and groups. Our key areas of enquiry included the following.

Numeracy provision

- Has it increased or decreased over the past two years?
- Is it more or less than literacy or about the same?
- Is it mostly embedded or discrete?
- How are organisations responding to the challenges of the national numeracy agenda?

It was heartening to hear that numeracy provision has increased in many areas and that this increase is in both discrete and embedded provision.

‘Specific numeracy classes have decreased but embedded numeracy classes have increased.’

‘It [numeracy provision] has grown – particularly at Level 1/2. Some embedding has happened but it’s mostly discrete.’

‘I am a literacy teacher teaching numeracy as demand for numeracy outstrips literacy 2 : 1!’

However, one in four of the responses said that numeracy provision was the same or had decreased in the past two years.

‘Expansion of numeracy provision is frequently influenced by lack of classroom space/venue availability.’

‘Numeracy is at the end of the feeding chain – the area is generally under-represented.’

‘Numeracy provision is about a third of literacy. Despite a new policy to encourage students who apply to do literacy to also consider numeracy, the take-up is low.’

‘All numeracy classes are 2 or 2 ½ hours whilst there are several literacy courses (1 or 2 day) with Greater Learning Hours (GLH). [There are] over 20 literacy tutors but only 6 numeracy teachers. It is not possible for a numeracy tutor to deliver am and pm on the same site – [this] results in numeracy tutors delivering fewer hours or spending lunch session moving around the borough.’

Numeracy focus at management level

- Do organisations have managers specifically responsible for numeracy?
- Does senior management actively promote the development of numeracy provision and capacity?

Again, there were encouraging responses in that, in many organisations, there was someone at curriculum leader or middle management level to nurture numeracy, and a genuine interest at senior management and policy level in promoting numeracy. Of the respondents who said that their organisation’s policies ‘actively promote’ development of numeracy provision, 45% said the organisation had members of management from a maths-related background, while 50% did not. This seems to imply that a proactive policy towards numeracy development does not necessarily require someone with

a numeracy or maths background in a senior management post.

At the other end of the scale, of the 13 respondents who said their organisation's policies 'ignore' or 'block' development, three said the organisation had members of management from a numeracy background, while nine did not. (The remainder did not respond.)

However, many respondents to the consultation process identified the lack of interest at senior management level as an obstacle to numeracy development across the organisation.

'There is often a lack of awareness at senior management level of programmes being delivered. If [senior managers] were more aware, there would be a better dialogue between departments, teachers, etc.'

Demand for numeracy

- What keeps adults from improving their level of maths?
- What are the challenges to getting the teaching workforce up to Level 2 and Level 3 numeracy achievements?

Interestingly, the reasons for adults not doing something about their personal numeracy skills were the same whether the focus group was potential adult learners, for example literacy students and members of the public, or post-16 sector teachers who know all about the strategy to raise numeracy standards in the workforce and who are engaged in delivering embedding Skills for Life.

The main reasons cited for not being proactive about improving their personal numeracy came as no surprise:

- they don't see the need to improve personal numeracy skills as a priority
- lack of time
- lack of commitment
- fear of maths and related anxiety



- negative attitude resulting from school maths experience
- don't see their own current numeracy skills level as a problem.

'Sometime we are too embarrassed to seek help – we get by on what we know to save face and keep our position as adults (I mean in relation to our kids).'

(What is your motivation for coming to maths classes?)

'To better myself, to be able to apply for jobs – they often have maths tests... to improve confidence. I was referred by my line manager, who knows that I am struggling with maths in my work. I didn't want to come but now I am glad I did.'

The challenges to motivating the teaching workforce to improve numeracy standards include:

- the requirement to integrate numeracy minimum core skills into all teacher education, especially the core personal skills (time factors)
- resistance towards numeracy of other subject teachers
- difficulties integrating into the programme

- difficulty for trainees and sometimes trainers to see relevance (teachers also face barriers to numeracy, maths phobia, etc.)
- motivation to integrate improvement of numeracy standards with other teaching.

However, teacher trainers are rising to the challenge.

'At our centre, we are trying to lead by example. All of the teacher training team have achieved Level 2 numeracy. We wanted to show our trainees that if we could do it, so could they – we now feel more confident about embedding numeracy in our teaching also.'

'All teacher trainers do Level 2 numeracy tests – [this] provides a model for trainees and opens up discussion.'

Groups of Skills for Life Improvement Programme participants were asked to comment on actions taken or needed in relation to implementing government strategy regarding improved levels of numeracy. One type of action is the setting up of regional networks and cluster groups to focus on numeracy, especially with reference to numeracy capacity building, and numeracy and employability. Where these networks have been set up, members are already feeling the benefits of collaboration and partnership. Many felt that the recent development and dissemination of resources through Maths4Life, the embedded learning materials and others was very helpful.

'Sharing concerns, resources and good practice with other colleagues in the same region makes me feel less isolated as I am the only numeracy person in my organisation.'

'We need a regional network for learning providers to focus on numeracy and employability.'



Numeracy teacher capacity

- What are the some of the issues?
- How are organisations dealing with capacity issues?
- What are the challenges for teacher education and CPD?

From the hundreds of responses to our consultation to date, here are some of the recurring themes.

- There is a lack of sufficient qualified and experienced numeracy specialists.
- Organisations find it difficult to recruit sufficient numbers for viable numeracy specialist courses.
- Organisations have difficulty in finding specialist numeracy teacher trainers.
- There is a negative impact on trainee teacher motivation of the level of maths (often perceived as irrelevant) now required in numeracy teacher qualification.
- Embedding of numeracy across provision is difficult – there is a lack of sufficient numeracy capacity.
- Non-numeracy teachers are expected to teach numeracy aspects, with little or no support or training.

'The emphasis on achieving accreditation to deliver numeracy is off-putting for many established teachers.'

'Many people now applying to teach numeracy are highly qualified mathematicians. However, they do not always have the skills or understanding necessary to address the needs of adults who found maths hard at school and who are still working at Entry Level.'

'At our regional maths centre, teachers haven't done the Additional Diploma or the Numeracy Specialist Certificate because they are scared of the requirement; they have fears about their own maths levels.'

In conclusion

There is a picture emerging – there is bold and innovative strategic action, commitment and belief in the need 'to do something about numeracy' on the one hand and a traditional fear and lack of action on the other. Most encouraging is the evidence from training providers, workplace settings and the offender learning sector.

There is, however, clear indication of the existence of all the same challenges and issues that have prompted previous numeracy campaigns and national prioritising of this area of work. Perhaps it is time to consult more thoroughly at ground level – with the practitioners and potential learners – to bring about irreversible and sustainable change.

'We participated in the functional maths assessment trials – trainees who had passed AON Level 3 failed – you could tell the questions were written by academics and not trainers working with employers and trainees.'

And finally, judging by the evidence, we certainly need the numeracy campaign to include teachers in the target audience!

The process of consultation is ongoing until the end of June 2008, with the next phase focusing on:

1. what the regional development advisers are reporting back from their work with organisations on embedding, diagnostic assessment and professional development planning
2. the challenges and issues of numeracy in the ESOL context
3. the challenges and issues of developing numeracy for and in employment.

We hope you will contribute to the national discussion on this very important issue.

Please contact Noyona Chanda:
n.chanda@lsbu.ac.uk