



SUBMISSION FOR APPROVAL OF A PROGRESSION UNITS

Name of Unit K'NEX for hands-on Learning (for tutors)

Centre Developed by the K'NEX User Group

Senior Manager – responsible for awards Andy Shercliff

Progression Unit Co-coordinator/contact person Andy Shercliff

Rationale
The unit will train teachers, tutors and other educators how to use the K'NEX construction kit to help adults and/or children to develop a better understanding of technology, science and numeracy, and improved creativity skills and problem-solving skills.
Target Group
The unit is for teachers, family learning practitioners, club leaders, leaders of childcare schemes, home educators, post-16 tutors and other educators.
Recommended Learning Hours
6 hours of delivery time.
Recommended Prior Learning
This course requires no prior knowledge or experience of K'NEX.
Progression Routes

To be completed by the progression unit reviewer (Please tick the appropriate box)	
I agree to the above PU proposal <input type="checkbox"/>	I suggest the enclosed modifications <input type="checkbox"/>
Signed: _____	Date: _____
Please return to Julie Pearson at OCNW with accompanying comments if appropriate: <i>West Lodge, Quernmore Road, Lancaster. LA1 3JT Email: j.pearson@lancaster.ac.uk</i>	

PROGRESSION UNIT TEMPLATE

Centre	K'NEX User Group			
Proposer	Andy Shercliff			
Unit Length (please tick)	6 hours	10 hours	20 hours	30 hours
	Yes			
Unit Title	K'NEX for hands-on Learning (for tutors)			
Unit Level	Level 2			
Pathway Title	8 Teacher training			

Introduction Please provide a brief overview of the unit

The unit will train teachers, tutors and other educators how to use the K'NEX construction kit to help adults and/or children to develop:

- a) a better understanding of technology, science and numeracy, and
- b) improved creativity skills and problem-solving skills.

The unit is for teachers, family learning practitioners, club leaders, leaders of childcare schemes, home educators, post-16 tutors and other educators. It lasts six hours, split equally between theory and practical sessions. No previous experience of K'NEX is required. © K'NEX UK User Group 2004.

Terminology During your course of study you will become familiar with the following terminology. You will need to demonstrate appropriate usage of the terminology within your portfolio of evidence

Terminology of K'NEX construction kits (eg rod, connector, instructions, challenge).
 Terminology of technology, science and numeracy (eg structures, mechanisms, forces, numeracy, shape, space and measure).
 Terminology of education (eg curriculum, outcomes, costing, staffing, evaluation).

What You Need to Learn (Learning Outcomes) During your course of study you will acquire the following knowledge, understanding and skills:

1. Understanding of K'NEX construction kit.
2. Educational uses of K'NEX
3. Planning and delivering a K'NEX event.
4. Building K'NEX models from instruction cards.
5. Completing K'NEX challenges.
6. Problem-solving skills.

What You Need to Do (Assessment Criteria) You will need to produce evidence that the following assessment criteria have been met:

1. The learner will receive Powerpoint presentations on "Introduction to K'NEX", "Educational uses of K'NEX" and "Planning and delivering a K'NEX event".
2. The learner will build at least two K'NEX models from instruction cards.
3. The learner will complete at least two K'NEX challenges.
4. The learner will provide a portfolio of evidence to prove completion and understanding of the theory and practical sessions above. The portfolio will include a tutor observation record, photographic evidence and annotated handouts. Staff will supervise the work, and will help learners to overcome any problems they may encounter. A digital photo will be taken of at least one of the challenges completed by each learner, so as to have photographic evidence of 10% of their work.

You will need to produce evidence to demonstrate an understanding of the terminology within the unit, and achievement of all the assessment criteria