

# OUTNUMBERED BY ENGLISH

A project to rationalise the difficulties associated with the English content of Functional Maths problem solving in order to develop a better diagnostic approach and classroom delivery.

## INITIAL THOUGHTS

THE PROJECT GREW FROM THE NEED TO DEVELOP A METHOD OF SUCCESSFUL DIAGNOSTIC AND DELIVERY TECHNIQUES FOR LEVELS 1 AND 2 FUNCTIONAL MATHS, REGARDLESS OF AWARDING BODY. IT HAS BECOME APPARENT THAT WHILST LEVELS OF MATHS ABILITY IN THE CLASSROOM MAY BE COMPARABLE, THE STUDENTS OF HIGHER LITERACY CAPABILITY FIND THE PROBLEM SOLVING EASIER TO HANDLE. THIS STUDY HOPES TO FIND THE ANSWER TO THE RIDDLE OF WHY THIS IS SO, AND DEVELOP A STRATEGY TO BEGIN AND CONTINUE AN EFFECTIVE LEARNER JOURNEY.

## OBJECTIVES

TO PRODUCE AN EFFECTIVE INITIAL DIAGNOSTIC TOOL TO ENABLE ACCURATE LEVEL IDENTIFICATION OF THE PROSPECTIVE FUNCTIONAL MATHS LEARNER.  
TO BE ABLE TO (BASED ON PERPETUAL LEARNER FEEDBACK) CONTINUALLY ASSESS AND BRING VITAL ELEMENTS OF FUNCTIONALITY INTO THE CLASSROOM AND CURRICULUM IN ORDER TO ADOPT A HOLISTIC LEARNING EXPERIENCE. THESE PROBLEM SOLVING ELEMENTS MUST BE EMBEDDED FROM THE FIRST OPPORTUNITY IN THE LEARNER JOURNEY

## METHODOLOGY ADOPTED

AN EVER EXPANDING STUDENT POPULATION OF FUNCTIONAL MATHS LEARNERS WILL BE GIVEN OUR NEW MULTI TASK /CORE SKILLS DIAGNOSTIC. A SERIES OF PROBLEM SOLVING TASKS AND NON CALCULATOR QUESTIONS WILL BE ATTEMPTED AND DIAGNOSED WITH OUR UNIQUE MARKING SYSTEM WHICH INCORPORATES AN ALLOWANCE FOR THE PROBLEM SOLVING ELEMENT. THE MARKING SYSTEM HAS THE ABILITY TO ACCURATELY SCORE THE TASKS TO AWARD CORRECT MARKS FOR SHOWING THE LEARNERS INTERPRETATION OF THE WORKING OUT. WE THINK THAT THIS, COMBINED WITH A SELF ASSESSMENT QUESTIONNAIRE AND EVER EVOLVING FEEDBACK, WILL PROVIDE EFFECTIVE DIAGNOSTIC MATERIAL TO ENABLE OUR STAFF TO NOT ONLY TO CORRECTLY PLACE THE LEARNER INTO THE LEARNING CYCLE, BUT ALSO HELP TO ENHANCE THE DELIVERY WITHIN THE CLASSROOM.

## REMEMBER.....!!!!!!

WHEN DELIVERING..

- 1.WHAT AM I BEING ASKED TO DO ?
- 2.WHAT MATHS DO I NEED ?
- 3.HOW DO I SHOW MY ANSWERS CORRECTLY ?

## KEY FINDINGS !

SOME VERY INTERESTING FINDING HAVE BEEN MADE IN A SHORT SPACE OF TIME. THESE FINDING HAVE ALREADY CHANGED THE WAY IN WHICH WE DELIVER FUNCTIONAL MATHS IN THE CLASSROOM SO AS TO ADOPT A METHOD FOR MAXIMISING LEARNING. WE HAVE QUICKLY DEVELOPED A THREE WAY BREAKDOWN OF THE FUNCTIONAL PROBLEM SOLVING.  
A....THE STUDENT NEEDS TO BE ABLE TO UNDERSTAND,AS FULLY AS POSSIBLE,WHAT IS BEING ASKED OF THEM AND BE ABLE TO IDENTIFY AND ENGAGE BOTH FAMILIAR AND UNFAMILIAR TERMINOLOGY.  
B....STUDENTS NEED TO BE ABLE TO DECIDE WHAT MATHS THEY ARE GOING TO USE TO SOLVE THE PROBLEM.  
C....STUDENTS NEED TO BE CONFIDENT IN THEIR APPROACH WHEN WRITING OUT THEIR ANSWERS ,AS FULLY AS POSSIBLE,TO MAXIMISE THEIR SCORE.

## CONCLUSIONS

KEEP DIAGNOSTIC RESULTS IN THE ILP. REGENERATE THE SELF ASSESSMENT UNIT PERIODICALLY . INCORPORATE PROBLEM SOLVING INTO EVERY LESSON PLAN. DELIVER LESSONS WHICH EXPLAIN HOW TO SHOW WORKINGS EFFECTIVELY AND STUDY THE ENGLISH TERMINOLOGY. ENCOURAGE Q AND A. CREATE A TERMINOLOGY HANDOUT FOR UNFAMILIAR WORDS AND PHRASES.