PROGRAMME SPECIFICATION – Undergraduate Courses

Programme Specification for Advanced Diploma in Overcoming Barriers to Learning in Mathematics

1.	**Awarding institution/body**	University of Worcester
2.	**Teaching institution**	Learning Works International Limited
3.	**Programme accredited by**	N/A
4.	**Final award**	Advanced Diploma (Level 6)
5.	**Programme title**	Advanced Diploma in Overcoming Barriers to Learning in Mathematics
6.	**Pathways available**	N/A
7.	**Mode and/or site of delivery**	Mix of on-site and distance learning at Uplands Conference Centre near High Wycombe
8.	**Mode of attendance**	Part-time
9.	**UCAS Code**	N/A
10.	**Subject Benchmark statement and/or professional body statement**	This programme has been drawn up in accordance with the National Qualifications Framework Education Subject Benchmarking descriptors *Subject benchmark statement: Education studies 2007*
11.	**Date of Programme Specification preparation/ revision**	December 2012; August and October 2014 – amendment to regulations.

12 Educational aims of the programme

The Advanced Diploma in Overcoming Barriers to Learning in Mathematics aims to equip class teachers, teacher assistants and educational practitioners with the knowledge and skills to support pupils with barriers to their learning maths and it is set within the relevant legislative and policy frameworks.

It investigates the current debate surrounding maths learning difficulties and, in particular, that of dyslexia and dyscalculia. It seeks to raise the awareness of teachers and other professionals and to promote a practical problem-solving, evidenced based approach to finding solutions that will work in the classroom. It develops understanding and recognition of the specific learning needs of individual pupils experiencing difficulties learning Maths. Participants are encouraged to take a balanced holistic view of the child as factors that contribute to the failure and success are identified to inform teaching programmes. From the outset participants will be introduced to practical classroom contexts and ideas for intervention and support for learning.

This Advanced Diploma examines the contribution and importance of the emotional state of the learner to their well-being and success in learning Maths. Ways to overcome "maths anxiety" are suggested and discussed. Participants will be given an overview of different ways to assess an individual pupil's learning needs, as well as a summary of interventions and resources. The philosophy underpinning this work is that pupils with numeracy difficulties are entitled to access the full range of educational provision available to their peers.

Detailed consideration is given to learning differences of pupils and how to overcome, through the use of visual and visualisation techniques, the practical barriers individuals face in their learning maths, e.g. word problems. Time is also devoted to planning and discussing research methodology within the context of school-based assignments.

The Advanced Diploma in Overcoming Barriers to Learning in Mathematics seeks to work within the framework of the current the Professional Standards for Teachers (DfE 2011) which states in its preamble that:

> Teachers make the education of their pupils their first concern, and are accountable for achieving the highest possible standards in work and conduct. Teachers act with honesty and integrity; have strong subject knowledge, keep their knowledge and skills as teachers up-to-date and are self-critical; forge positive professional relationships; and work with parents in the best interests of their pupils.

Point 5 of the Professional Standards is particularly relevant to this course and states that for teachers to adapt their teaching to respond to the strengths and needs of all pupils they will need to:

a) know when and how to differentiate appropriately, using approaches which enable pupils to be taught effectively
b) have a secure understanding of how a range of factors can inhibit pupils' ability to learn, and how best to overcome these
c) demonstrate an awareness of the physical, social and intellectual development of children, and know how to adapt teaching to support pupils' education at different stages of development
d) have a clear understanding of the needs of all pupils, including those with special educational needs; those of high ability; those with English as an additional language; those with disabilities; and be able to use and evaluate distinctive teaching approaches to engage and support them.

Teacher's Standards p7

The Advanced Diploma is designed for non-specialists. It will provide a foundation of knowledge and understanding regarding the education of those children who experience difficulties with numeracy and Mathematics, introducing the latest research findings and insights into current best practice. As such, this course is of real benefit to, and can be studied by, a wide variety of people including:

- Classroom and subject teachers
- Maths teachers
- Teachers with responsibility for inclusion and 'Dyslexia friendly' initiatives
- Learning support co-ordinators/SENCos
- Learning support teachers

The course is also open to learning support assistants with appropriate experience, opportunity and support from school.

By the end of the Advanced Diploma participants should be able to:

1. Critically evaluate the concept of inclusive education
2. Identify and analyse elements of numerical skills that pupils of all ages find difficult;
3. Identify and utilise a range of assessment and educational provision in order to respond positively to individual learning needs;
4. Critically analyse issues and create practical solutions for use in their teaching;
5. Critically evaluate the contribution of others to the successful resolution of individual difficulties in learning Mathematics
6. Reflect upon their professional development.

13 **Intended learning outcomes and learning, teaching and assessment methods**

Knowledge and understanding:

Having successfully completed this programme course members will be able to demonstrate knowledge and understanding of:

- Current theories of SpLD, drawing from education, cognitive psychology and neuro-psychology
- Indicators of dyslexia
- Technical terminology relating to dyslexia
- The cognitive and emotional difficulties which impede the acquisition of knowledge for the dyslexic learner
- Current theories of learning
- Theoretical models of reading
- Theoretical models of spelling
- The interaction of legal, professional, psychological, scientific and political issues in the range of attitudes to dyslexia within society
- Research design, evaluation and application

Examples of learning, teaching and assessment methods used:

The learning and teaching environment reflects the principles of multisensory practices which are essential for effective professional practice in the teaching of SpLD pupils and course members. The curriculum is designed in such a way as to accommodate modelling, scaffolding, guided and shared learning.

Knowledge and understanding of SpLD will be achieved through lectures and other tutor-led teaching and through course guidelines, extensive, guided reading lists and recommended text books. Distributed learning, making use of managed learning environments, provides flexibility and accessibility of learning and teaching. Practical workshops are used to develop professional competence in the assessment and teaching of pupils and course members with dyslexia.

Course member-led seminars, group projects and presentations will enhance the learning environment. Course member feed-back is an essential component of the learning process, and this is achieved by targeted, group seminars and individual tutorials.

A range of assessment techniques is adopted to accommodate different learning styles and interests. Individual development of subject-related knowledge is assessed mainly through a combination of written assignments and contributions to workshops and seminars and progress is assessed formatively and summatively.

Cognitive and intellectual skills:

Having successfully completed this programme course members will be able to:

- Articulate and reflect on a subject-specific body of knowledge;
- Apply subject-specific terminology and method;
- Evaluate conflicting positions and formulate independent views;
- Synthesise current theories of learning in relation to the cognitive profile of the SpLD learner
- Analyse the role of metacognition in learning and teaching environments for dyslexic learners
- Critically assess teaching methodologies applicable to dyslexia
- Analyse the theoretical constructs of assessment
- Synthesise information from a range of primary and secondary sources of evidence in cognitive psychology, neurology and educational studies to determine their relative significance in the field of dyslexia
- Interpret research
- Structure argument and provide empirical evidence to support it.

Examples of learning, teaching and assessment methods used:

Intellectual (thinking) skills are an integral part of the programme and are developed throughout the curriculum in a variety of ways: lectures, seminars, small-group work, document-based analyses, problem-solving exercises, report writing, group and individual feedback. A self-audit

of academic skills is used to help to set targets and monitor development in this area, and to help focus upon specified needs with the support the tutors.

Formative and summative written assignments are designed to assess individual skills and level of achievement. Small group work and oral presentations are designed to help develop skills.

Practical skills relevant to employment:

Having successfully completed this programme course members will be able to:

- Recognise dyslexia
- Appraise a pupil based on observation or assessment of attainment tests and reports of other professionals
- Develop a range of effective teaching skills relevant to the special educational needs of SpLD pupils and course members
- Use a range of technical aids in the teaching of dyslexic pupils and course members

Examples of learning, teaching and assessment methods used:

The learning and teaching environment reflects the principles of multisensory practices which are essential for effective professional practice in the teaching of dyslexic pupils and course members. The curriculum is designed in such a way as to accommodate modelling, scaffolding, guided and shared learning.

The learning environment is organised in such a way as to exemplify good practice in schools so that course members can learn how to use teaching methods and teaching aids with the dyslexic learner in mind to ensure that teaching environments are dyslexia-friendly.

The curriculum is designed so that, in a supported environment of guided workshops, course members are given opportunities to develop their practical, professional skills.

A variety of methods are used to assess skills in this area: written assignments, workshop participation and group/individual presentations.

Transferable/key skills:

Having successfully completed this programme course members will be able to:

- Organise their learning through self-organisation and adherence to guidelines and deadlines
- Communicate effectively with other professionals and peers orally and in written format
- Contribute confidently and appropriately to discussion
- Work effectively as part of a task-orientated group, demonstrating inter-personal skills
- Negotiate effectively in group work

Examples of learning, teaching and assessment methods used:

The development of transferable skills is a pivotal aspect of the programme. The curriculum is designed to ensure that differentiation is achieved by a focus on the individual's autonomy. Goal-setting is built into the curriculum so that course members will be able to monitor their progression.

Course members will be expected to take responsibility for their own learning and will be provided throughout with opportunities of demonstrate that they are a responsible and accountable professional.

Seminars and workshops are structured to facilitate and require collaboration with other course members and tutors.

Problem-solving exercises help to develop skills and course members will be encouraged to participate in e-mail discussion. Corse resources will be distributed through CDroms, email and internet sites, which will offer opportunities for course members to further develop their ICT skills.

Course member's transferable skills will be assessed through: written work, group presentations and guided discussions.

13 **Assessment Strategy**

We have a policy of offering formative as well as summative assessment on assignments. In the event that draft assignments are looked at by tutors, they will not be graded or 'corrected' in any way, beyond indicating to the course member that the assignment is roughly a Pass or Fail. In other words, the facility to look at drafts is a courtesy check that a course member's work is not a clear Fail, and is especially appropriate for course members whose first language is not English and / or for 'non-standard' course members writing an academic essay for the first time in a long while and who do not have a strong academic background.

To facilitate this policy course members are advised to submit a detailed essay framework to the course tutor, indicating sub-headings, bullet points of what will be included in the sections and an outline of the readings to which they will be referring to support discussion and debate.

As course tutors who set the assignments we are not permitted to read a full rough draft before submission. However, course members are able to ask the course tutor to read a section of an essay or report which is causing you concern to check that a course member is on the right lines. Course tutors will NOT make comments at the draft stage about bibliography and will not act as proof-readers.

Course members will be expected to adhere strictly to the prescribed word limits, and marks will be deducted for too few or too many words, within a 10% margin. Non-submission by the specified date without a medical certificate will be classified a fail.

The course operates under the Undergraduate Regulatory Framework which sets out the full regulations for passing modules, grading of modules, retrieving failed modules, progression from one academic level to the next and requirements for awards.

The course is fully compliant with UW regulations for assessment, mitigation, appeals and complaints. For further details on any of these areas please follow this link to the Registry Services website **www.worc.ac.uk/registryservices/** or see the Student Handbook **www.worcester.ac.uk/registryservices/666.htm**.

Specific learning outcomes are detailed in the module outlines and specifications.

The tables below shows the full range of assessment items and options used in each module and also shows the relative weightings of each item.

BAED 3044 Overcoming Barriers to Learning in Mathematics

Summative Assessment Items*	**Indicative Word Limit**	**Weighting**	**Learning Outcomes Assessed**	**Anonymous Marking**
A Case Study	1600	40%	1,2, 3, 4, 5, 6	No
Design, deliver and evaluate a staff training session	1600	40%	1,2, 3, 4, 5, 6	No
A Literature-based Inquiry	2000	60%	1, 2, 3, 4, 5, 6	No
An improvement report	2000	60%	1, 2, 3, 4, 5, 6	No

A literature or improvement report	4000	100%	1,2, 3, 4, 5, 6	
A summary of personal learning	400	0% Compulsory element		

*Students must complete element(s) totalling 100% plus the summary of personalised learning.

BAED 3004 Independent Study

Summative Assessment Items	Indicative Word Limit	Weighting	Learning Outcomes Assessed	Anonymous Marking
A literature or improvement report	4000	100%	1,2,3,4,5,6	No
A summary of personal learning	400	0% Compulsory element		

A summary of personal learning is required (approx. 400 words) to complete either option, i.e. this must be submitted with your work by the final hand in date. This is highly valued by the tutors and is a key element to the course outcomes, but it will not be graded because of the personal content and nature of the reflective process.

This summary asks you to reflect on what you have learned from the course, how it has helped you and the school to develop and what you hope to do in the future. This reflection can include positive and negative thoughts and seeks to encourage celebration and recognition of learning, i.e. what worked or did not work or what you would do or not do again. The style is personal and descriptive. Comments supported with brief examples will help to ground personal views and feelings.

15 Programme structures and requirements

The Advanced Diploma 'Overcoming Barriers to Learning in Mathematics' is comprised of two modules:

BAED 3044 Overcoming Barriers to Learning in Mathematics
BAED 3004 Independent Study

Each module is worth 15 credits (Level 6) and is mandatory
There is an attendance requirement of 75% at taught sessions

16 QAA and Professional Academic Standards and Quality

The aims and learning outcomes of the programme, along with the assessment strategy have been designed with specific reference to Education subject benchmarks.

17 Support for students

Course members receive resources, reading lists and course workbook before starting each module. In addition they are asked to undertake two short preparation tasks. Once on the course, members are given additional readings, articles and practical resources. Course members are also allocated an individual tutor and can communicate by email and telephone.

In addition the University provides:

- Library support
- Study skills and learning styles advice
- Counselling and Disability Services which can provide specialist information, guidance and support

18 Admissions

Admissions Policy

This course seeks to recruit those working in schools who have already achieved a qualification at level 5, have a knowledge of SEN students and practical classroom experience.

Entry requirements

The University's standard entry requirements apply and can be found at:

http://www.worcester.ac.uk/registryservices/documents/AdmissionsPolicy.pdf

In addition the University policy states: "We welcome applicants who hold alternative qualifications/experience different to those shown in this section who can demonstrate the ability to benefit from the course and show their potential to complete the course successfully. Although recent preparatory study at an appropriate level (e.g. an Access to Higher Education Diploma) is recommended, students may be considered on the basis of prior evidenced professional/work experience and/or other assessment procedures, and the assessment of personal suitability".

Recognition of Prior Learning

University Admissions office staff will be able to offer information, advice and guidance on this process. Information on eligibility for recognition of prior learning for the purposes of entry or advanced standing is also available from the University webpages or from the Registry Admissions Office (01905 855111).

Admissions procedures

Initial enquiry and application will normally be made through Learning Works International Ltd. As part-time applicants do not apply through UCAS, the application will be processed directly by the University of Worcester. Where necessary applications can be referred to the link tutor.

Admissions/selection criteria

All participants must be able to demonstrate that they are working or volunteering either full or part time in an educational setting where they will be able to reflect upon their own practice to successfully complete the modules. Applicants may be asked to provide evidence of support from the school in which they work or volunteer.

19 Methods for evaluating and improving the quality and standards of teaching and learning

The course team will produce an annual evaluation report that will be accompanied by a link tutor report. Modules will be evaluated with feedback provided to the participants through both formal and informal meetings held at least twice a year. Samples of work will be moderated and sent to the external examiner as appropriate.

20 Regulation of assessment

Requirements to pass modules

- Modules are assessed using a variety of assessment activities which are detailed in the module specifications.
- The minimum pass mark is D- for each module.

- Students are required to submit all items of assessment in order to pass a module, and in some modules, a pass mark in each item of assessment may be required.
- Some modules have attendance requirements.
- Full details of the assessment requirements for a module, including the assessment criteria, are published in the module outline.

Submission of assessment items

- Students who submit course work late but within 5 days of the due date will have work marked, but the grade will be capped at D- unless an application for mitigating circumstances is accepted.
- Students who submit work later than 5 days but within 14 days of the due date will not have work marked unless they have submitted a valid claim of mitigating circumstances.
- For full details of submission regulations see Undergraduate Regulatory Framework.

Retrieval of failure

- Students are entitled to resit failed assessment items for any module that is awarded a fail grade, unless the failure was due to non-attendance.
- Reassessment items that are passed are graded at D-.
- If a student is unsuccessful in the reassessment, they have the right to retake the module (or, in some circumstances, take an alternative module).

21 Indicators of quality and standards

The University underwent a QAA Institutional Audit in March 2011. The audit confirmed that confidence can be placed in the soundness of the institution's current and likely future management of the academic standards of its awards and the quality of the learning opportunities available to students. The audit team highlighted several aspects of good practice, including the student academic representative (StARs) initiative, the proactive approach which supports the student experience for disabled students, the comprehensiveness of the student online environment (SOLE), the wide range of opportunities afforded to students to enhance their employability, the institution's commitment to enhancement, and the inclusive approach to working with its collaborative partners.

22 Graduate destinations, employability and links with employers

Participants engaged in this part time programme are already employed working in schools. The in-service course is designed to improve the skills and knowledge of the workforce. Participants may use the credits obtained to contribute to further study at level 6 or in some cases use these credits as part of postgraduate programmes elsewhere.

Graduate destinations

Career progression routes for those successfully completing the University Diploma are part of the value added by this course. Successful candidates have progressed to study at Masters level and to undertake further accredited CPD activity.

Student employability

Although this is an **in-service** course and therefore participants will most probably be employed, there is an opportunity for further career enhancement as a result of the CPD activity involved in this programme. All the modules require students to reflect upon their practice and develop their work-based knowledge and understanding.

Links with employers

The course has been designed in consultation with schools employing Special Needs Coordinators. The partnership between Learning Works International Ltd and the University has enabled the programme to be delivered as an **in-service** course, with a focus on

current and aspiring Special Educational Needs Coordinators working in the independent sector.

Please note: This specification provides a concise summary of the main features of the programme and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if s/he takes full advantage of the learning opportunities that are provided. More detailed information on the learning outcomes, content and teaching, learning and assessment methods of each module can be found in the module outlines and the course handbook provided to all students at the start of the course. The accuracy of the information contained in this document is reviewed by the University and may be checked by the Quality Assurance Agency for Higher Education.