Module 3 Dyslexia: Identification and Support
Action Research Support Notes

The action research task in module 3 has been included to support the GTCS Professional Portfolio which you will develop when applying for Professional Recognition.

The Professional Recognition application form asks teachers to:

- Describe how they have developed their area of expertise/accomplishment as part of a coherent, systematic and sustained learning experience.
- Outline how enhanced academic and professional knowledge of the subject/topic/issue has been supported by relevant research, literature, policy and practice.
- Critically examine, analyse and evaluate what impact the area of development and expertise has had in their thinking, learning and practice and on learners and their learning.
- Look at how their knowledge and experience has been shared with others and what impact this has had, including extracts of analysed evidence to support this. Look at next steps for professional learning in the light of this work and outline how the professional discussions with their line manager have shaped their thinking and practice

Your action research should help evidence how you have developed and shared your knowledge, understanding and pedagogical expertise within the area(s) of your professional practice in which you are seeking Professional Recognition. Your portfolio will include evidence of critical discussion and analysis of evidence of the impact of your work on your professional practice, and your learners and colleagues. It is therefore important that your action research is designed in such a way that it enables you to provide the evidence required highlighted above. You should also include the learning and insights gained from completing modules 1, 2 and 3.

Action Research

Action research is a systematic study that combines action and reflection with the intention of improving practice (Ebbutt, 1985)

Action research is an approach to improving education by changing it and learning from the consequences of changes (Kemmis and Mctaggart, 1992)

The GTCS defines action research as **research carried out within your practice to improve pedagogy to support student attainment and achievement.**

Action research is an enquiry method that helps you to interrogate and reflect on your own practice which can be carried out individually or in collaboration with others. When teachers write lesson plans or develop academic programs, they are engaged in the action planning process so the process is not unfamiliar.

Action research involves practical activities combined with theoretical understanding combining the following areas:

- Selected research method
- Practitioner enquiry
- Reflective practice
- Critical analysis
- Professional development

As you explore a topic/focus area for your action research the following questions may help focus on your action research question:

1. **What am I trying to accomplish?** **(Aim)** **- What is the problem (the area of practice to change)?**
2. **How will I know that a change is an improvement?** **(Outcome)**
3. **What change can I make that will result in an improvement?**

The table below sets out some key features of action research as defined by Choen, Manion and Morrison 2005 which may help with the planning of your own action research.

Action Research – Key Features				
Purpose	**Focus**	**Key Terms**	**Characteristics**	**Data collection tools**
To plan, implement review and evaluate an intervention designed to improve practice/solve local problem To through research involvement and ideology critique To develop reflective practice To promote equality democracy To link practice and research To promote collaborative research	Outcomes of interventions Participant empowerment	Action Improvements Reflection Monitoring Evaluation Intervention Problem solving Empowering Planning Reviewing	Context specific Participants as researchers Reflection on practice Interventionist – Leading to solution of 'real' problems and meeting 'real' needs Empowering for participants Collaborative Promoting praxis and equality Stakeholder research	Questionnaires Diaries Interviews Case studies Observational data Experimental design Field notes Photography Audio & video recordings Documents Records Attainment data

Area of research

Identifying an area for improvement can be an individual process, but is often more effective as part of a collaboration. Working with another person or a group can help with generating ideas, as well as evaluating the impact of those ideas. Some examples of possible action research topics linked to the dyslexia and identification could be linked to:

- Dyslexia and definitions
- Collaborative assessment of dyslexia
- Early literacy and Numeracy - use of Scottish Book Trust programmes e.g. Read write Count
- The impact of dyslexia
- Improving inclusive practice
- Dyslexia and assessment arrangements

This list is not exhaustive.

Choice of Action Research Methodology

Prior to starting your action research consider the range of different action research methodologies available and which one may best support your action research project. Some examples follow.

Whichever research methods you decide to use for your action research it will be helpful to make use of a research cycle to implement and test your ideas. Further information on research cycles is provided in these support notes.

The School Improvement Partnership Programme (SIPP)

The School Improvement Partnership Programme (SIPP) is a solution-focused approach to Scotland's attainment issues with a focus on innovating to tackle educational inequality. In the spirit of action research, the programme aims to encourage staff to learn from each other, experiment with their practice and monitor and evaluate change. Within the School Improvement Partnership Programme, a range of improvement methodologies has been used with the single aim of addressing educational inequity through collaborative approaches to system improvement - Collaborative Action Research (CAR), Instructional Rounds and Lesson Study. An overview of CAR is highlighted below and further information on SIPP and the other methodologies can be found on the Improvement Hub https://education.gov.scot/improvement/research/The%20School%20Improvement%20Partnership%20Programme

1.   Collaborative Action Research (CAR) methodology

For the individual in the classroom, CAR bridges the 'gulf' between theory and practice. It converts academic concepts of 'best practice' into practical ways of improving outcomes with real students in real classrooms. It is what happens when schools and teachers research the changes they are implementing as they happen and it gives teachers the chance to 'flesh out' and adapt the solutions proposed by researchers so that they can work in real, specific situations. CAR also gives academic research a personal dimension that enables teachers to reflect on ideas in practice and create their

own solutions. Sometimes referred to as collaborative enquiry CAR is a framework that can draw on a range of methods and accords well with some of the features of highly effective practice in HGIOS 4, the GTCS standards (practitioner enquiry) and Education Scotland. It is recommended by Education Scotland as a core element for working to improve education services

Research tells us that CAR is a successful approach to improving outcomes for learners and has been highlighted by Education Scotland as a methodology to help practitioners measure impact as they go. It supports practitioners to plan and review their work in a systematic way in order that they can make informed, evidence based decisions about what to do more of and what to change.

CAR can include the cycle of Assess, Plan, Do, Review (APDR) or Plan, Do, Study, Act (PDSA), further information on both cycles is on pages 6 and 7. CAR has been used to gather evidence of the impact an area of research and improvement undertaken by practitioners.

CAR looks different in different circumstances but is characterised by these activities, linked here to three key phases as highlighted in figure 1 and are described in more detail.
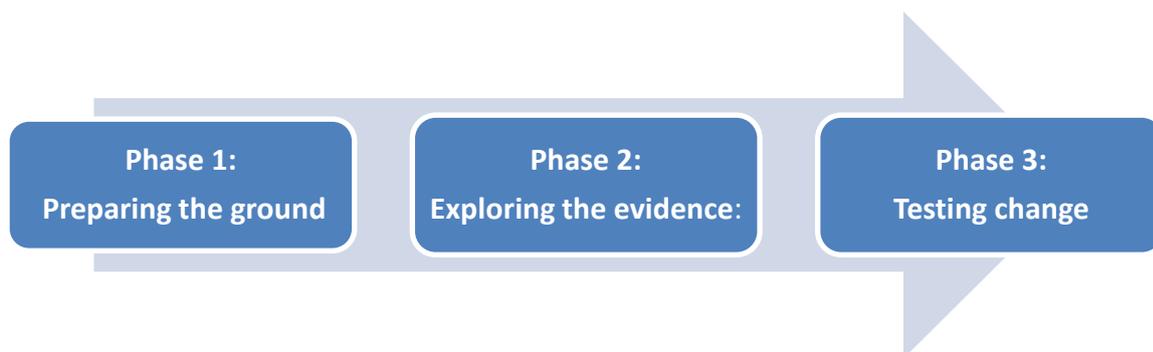
Phase 1: Preparing the ground   **Phase 2:** Exploring the evidence: **Phase 3:** Testing change

Figure 1 Collaborative Action Research Steps

Phase 1: Preparing the ground
• Analysis of context (Where are we now?)
• Agreeing research questions (What are our agreed key aims and concerns?)
• Agreeing purposes (Can we measure progress and impact? What would success look like?)

Essential elements of this first step are to question what is often taken for granted and to begin looking at existing knowledge about what works

Phase 2: Exploring the evidence:
• Using the available expertise (how do we exploit internal and external knowledge?)
• Collecting data (what further evidence do we need?)
• Making sense of the evidence (what new insights do we have?)

Phase 3: Testing change

• Deciding on actions to be taken (What changes do we need to make?)

• Implementing a strategy (How do we lever and embed change?)

• Monitoring outcomes. (How do we know we have made a difference?)

Reporting on activity and results is a key activity at every stage and findings need to be produced in a form that can be accessed and shared with other practitioners. These findings are the basis of on-going reflection on action that, in turn, informs future planning and the refinement of problem identification and activity. Further information on CAR can be found on the Improvement Hub https://education.gov.scot/improvement/documents/collaborativeactionresearchresourcejuly2.pdf

2.   GTCS Action Research Cycle

The GTCS have developed a research cycle to support practitioners plan their research.

Take informed action → Identify the focus → Use research to inform your thinking → Identify your specific focus → Plan and implement your intervention → Gather data → Analysing data → Evaluate and report the results

Action Research

Figure 2 GTCS Action Research steps

Action Research Steps

Step 1: Identifying the Focus
What element(s) of my/our practice or what aspect of student learning do we wish to investigate?

Step 2: Use research to inform your thinking
What is already known in this area?

Step 3: Identify your specific focus
Generate a set of meaningful research questions to guide the inquiry.

Step 4: Plan and implement your intervention
What change are you going to make? How will you measure the impact of this change?

Step 5: Gather Data
Most teacher researchers use a process called triangulation to enhance the validity and reliability of their findings by using multiple data sources. There is lots of evidence already in everyday practice so the key to managing triangulated data collection is, first, to be effective and efficient in collecting the data available to you on a daily basis, and, second, to identify other sources of data for example tests, classroom discussions, or questionnaires.

Step 6: Analysing Data
What is the story told by these data sources? Why did the story play itself out this way?

Step 7: Evaluate and report the results
How does the data story support the pupils' attainment and achievement?
How does it support your learning?
The reporting of action research usually happens in informal settings or by a written report but choose the way which is most helpful for you.

Step 8: Taking Informed Action
Your learning can be applied in other area and then you can start to identify whether you need to deepen your learning in this area or change focus to another area for development.

3.   PDSA (Plan, Do, Study, Act) and APDR (Assess, Plan, Do, Review)

Both of these models are cyclical frameworks which support the process of improvement. PDSA is the data driven framework used within improvement methodology and focuses on 'small tests of change'. APDR can be considered more intuitive to educators – as it focuses on 'what we do on a day to day basis when we plan learning opportunities' and is effective for GTCS practitioner enquiry incorporating the triangulation of data- qualitative data (observations, discussion, professional judgement)
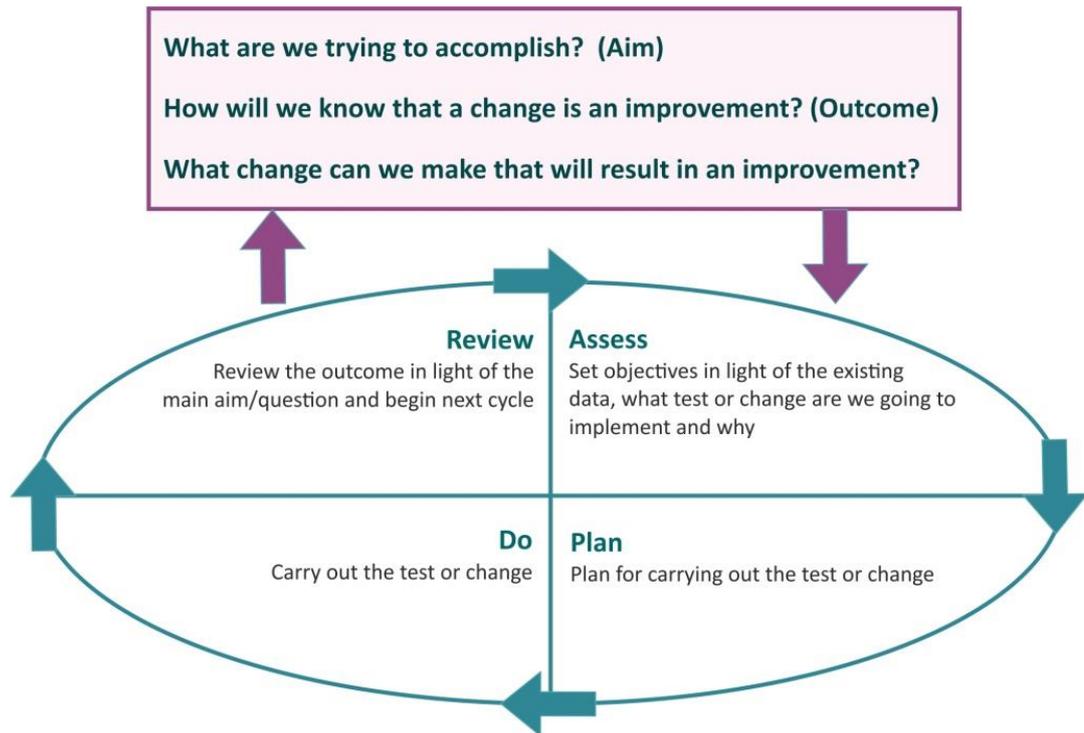
PDSA (Plan, Do, Study, Act)

What are we trying to accomplish? (Aim)

How will we know that a change is an improvement? (Outcome)

What change can we make that will result in an improvement?

Review
Review the outcome in light of the main aim/question and begin next cycle

Assess
Set objectives in light of the existing data, what test or change are we going to implement and why

Do
Carry out the test or change

Plan
Plan for carrying out the test or change

Figure 3

APDR (Assess, Plan, Do, Review)

What are we trying to accomplish? (Aim)

How will we know that a change is an improvement? (Outcome)

What change can we make that will result in an improvement?

Act
Ready to Implement?
What changes need to be made?
Next cycle ...

Plan
Set objective
Make predictions
Plan to carry out the cycle -who,what, when
Plan for data collection

Study
Complete analysis of the data
Compare data to predictions
Summarise what was learned

Do
Carry out the plan
Record problems and observations
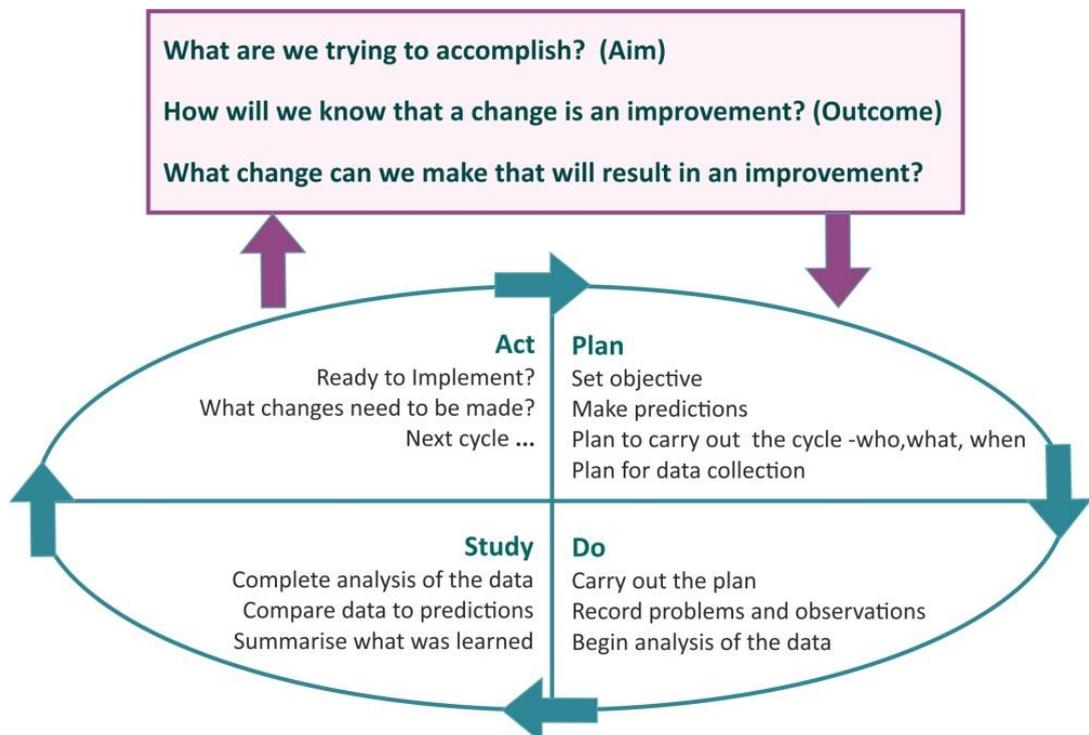Begin analysis of the data

Figure 4

Summary of PDSA and APDR

Either one of these models of improvement methodology could provide a structure to your action research. Both models aim to start small, with the possibility of upscaling the improvements. There are similarities between both models which are highlighted in figure 5.
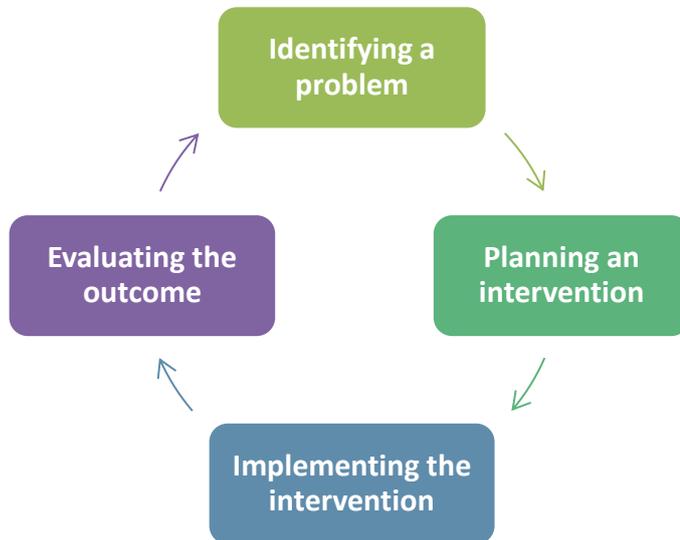
Identifying a problem → Planning an intervention → Implementing the intervention → Evaluating the outcome → (back to Identifying a problem)

Figure 5

Ethics and integrity in research

Ensure you have discussed your research project with your line manager/head teacher and consult with your local authority about your proposal. There may be codes of practice or protocols which you must follow. Any participant in your research must know what is involved and provide informed consent. You must also be aware of, and follow the requirements under data protection legislation.

'Because the activity of action research almost inevitability affects others, it is important to have a clear idea of when and where the action research necessarily steps outside the bounds of collating information which is purely personal and relating to the practitioners alone. Where it does so, the usual standard of ethics must be observed: permissions obtained, confidentiality maintained, identifies protected'. (Denscombe 1998:63)

Action Research Structure.

The list below is not prescriptive but aims to provide an example of how a piece of action research could be structured. It will be helpful if you look at the GTCS individual application form for Professional Recognition to ensure you are including the appropriate information within you action research to support your application for GTCS Professional Recognition. A copy of this is available within Module 3

- Abstract
- Introduction
- Literature Review
- Methodology
- Participants and Setting
- Interventions
- Data Sources and Analysis
- Findings and Results
- Discussion and Conclusions
- References

Project management of your action research

When you have decided on your focus area and are planning your action research it will be helpful to keep in mind the following questions as they can help reduce potential difficulties, support effective project management and enable the completion of research which is competent and valid.

1. Is there an agreed aim that is understood by everyone involved?
2. Are we using all our knowledge to find the right changes and prioritise those likely to have the biggest impact in relation to our aim?
3. Does everyone understand the methods we will use?
4. Can I measure and report progress?
5. Am I managing my time in the best possible way to achieve the research aims?
6. Do I have clear plans for innovating, testing, implementing and sharing learning so we can translate and apply the improvement more widely
7. Does everyone understand the projects timescales?

Further Reading
GTCS Recommended Research and Reading

GTCS Action Research   http://www.gtcs.org.uk/professional-update/research.aspx

Online Access to Education Journals
The GTCS provide all registrants with free online access to education journals Education Source - EBSCO package and the Leadership & Management Learning Centre. Education Source is a collection of over 1,700 education journals.

Education Hub
EducationHUB is an interactive online platform that provides an opportunity for education practitioners to share, discuss and review unpublished practitioner produced research and enquiry.

Current Academic/ Practitioner Research
In this area the GTCS feature recently completed or published research. This could be practitioner, academic and/ or grant funded educational research.

The GTCS know teachers are 'interest rich and time poor' so in this area the Research Engagement Group recommends a selection of education journals that may be of interest.

Research Engagement Group
A Research Engagement Group has been set up to help support, promote and facilitate critical engagement with research. A range of colleagues across the education community who are currently actively engaged with educational research and/ or supporting others engaging with research were invited to be part of the group.

Useful Research Links
Academia.edu
British Educational Research Association (BERA)
Centre for the Use of Research & Evidence in Education
Discourse: Studies in the Cultural Politics of Education
European Journal of Education
Mesh guides
SAGE Research Methods
Scottish Educational Research Association
Thinking Together