Evaluating the Learning Environment

Adapted from Ysseldyke and Christenson (1987)

Contents

Introduction

March 2017

Enquiry isn't a specialist activity. It is something we all do regularly - making a mental note of something that went well or how we could change things for next time. As easy as it seems to reflect on what we do day-to-day, the starting point for deliberate enquiry can be difficult. Key to engaging with research in a genuine, long-term way as a practitioner is to start with reflection - reflection *on* practice and reflection *of* practice.

Reflective-practice is sometimes presented as the opposite to evidence based practice; the qualitative vs the quantitative. Quantitative research is held up as the best research can be, whether that's the EEF toolkit and trials or the What Work Clearinghouse measures. One argument for evidence based practice over reflective practice is that the latter risks pathologising the practitioner and finds fault with the teacher or student rather than the wider environment.

Action research (or at least the term) is gaining popularity and the close link between action research and reflective practice leads to arguments that they lack value and relevance between settings. Cautious voices remind that quantitative studies don't necessarily provide the answers, as Dylan Wiliam says, "[In education] everything works somewhere and nothing works everywhere. The interesting question is 'under what conditions does this work?"

It's not realistic for everyone to be part of large-scale RCTs, particularly in settings that regularly don't fit selection criteria like small or special schools. This can feel isolating and make research engagement seem irrelevant. Reflective practice is one way to get going and can take many forms, from keeping a diary to working in pairs or triads or developing cyclical action research projects, so where do we start and how can we incorporate research into what we do?

This document is a summary of a single research paper* and a suggestion of how it can be used to directly inform research engagement in the classroom. It's a bit of an experiment to see whether this sort of thing might be useful so feedback is welcome! I have used this paper on several occasions to provide a framework with which to identify an area of focus and as a starting point. Whether it is used for enquiry in the closed classroom or over a wider group; as a starting point for a whole school focus or simply to monitor the classroom over time, I hope it provides encouragement for more people to bring evidence into their practice.

Beth Greville-Giddings

*Ysseldyke, J. E. and Christenson, S. L. (1987) 'Evaluating students' instructional environments', Remedial and Special Education, 8(3), pp. 17–24.

Summary of the research

‘Evaluating students’ instructional environments’

Ysseldyke and Christenson (1987)

The article explores the notion that educators should assess the instructional environment for individual learners when planning and evaluating the effectiveness of instruction in special education.

It is the authors’ belief that ‘the purpose of any assessment is intervention’. In the article they evaluate the factors related to instructional outcomes including student characteristics, environmental factors and instructional factors. Assessing ‘What is wrong with the student’ or trying to determine the inadequacies of instruction are only some of the factors on which instructional outcomes are dependent and they discuss how recognition of this led to efforts to assess the instructional environment. They state that ‘learning and behaviour do not occur in a vacuum’, adding that ‘student performance in school is a function of an interaction between the student and the instructional environment’. At the time of writing, all efforts to develop systems of assessing the instructional environment had been ‘non-systematic and problematic’. There are many factors or variables to consider when assessing the instructional environment and the article presents a comprehensive methodology to help professionals meet the challenge of planning interventions.

The Instructional Environment Scale

‘The Instructional Environment Scale (TIES) (Ysseldyke & Christenson, 1987) is designed to provide professionals with a ‘comprehensive description of individual students’ instructional environments’. There are two major reasons stated for using TIES: to *describe* the extent to which a student’s academic and behaviour problems are down to the instructional environment, and to *identify* starting points to research and develop appropriate interventions. In addition to these the authors list seven secondary purposes for the scale: Description of instructional strengths and needs (an inventory); intervention planning (the scale is not designed as a way of monitoring these); pre-referral (to special education) intervention; consultation (used to pinpoint specific areas for teachers and consultants to work together); IEP development (observation of students); environment contrast; teacher training (to provide information at the level of *the individual student*); progress monitoring (in addition to quantitative information); research (to provide data on the qualitative nature of instruction).

In addition to the purposes of using TIES there is a clear description of what TIES is *not* designed to do. They are clear that TIES is not a teacher evaluation scale. Whilst there are elements in the scale that would be useful in evaluating teachers, these are not comprehensive and there are many factors included that are out of the control of the teacher. TIES is not a norm-referenced test and there should be no reason to compare one student’s instructional environment to other instructional environments. Finally, TIES is not designed to compare schools or school districts as there are many features that influence the nature of the classroom, including student characteristics, which can not be compared.

Summary of the research

The scale is designed to be completed using three kinds of data: observation of student in classroom, interviewing the student's teacher, and interviewing the student. This information is then used to complete TIES and pinpoint areas of strength and weakness about the instructional environment.

12 components of effective instruction

TIES is used to gather information on 12 components of effective instruction:

- Instructional Presentation
- Classroom Environment
- Teacher Expectation
- Cognitive Emphasis
- Motivational Strategies
- Relevant Practice
- Academic Engaged Time
- Informed Feedback
- Adaptive Instruction
- Progress Evaluation
- Instructional Planning
- Student Understanding

The authors believe the process of student assessment in the instructional environment is essential for a complete assessment student needs 'before labelling students as handicapped'.

Ysseldyke, J. E. and Christenson, S. L. (1987) 'Evaluating students' instructional environments', Remedial and Special Education, 8(3), pp. 17–24.

The following article was also used to help refine phrasing of criteria:

Thurlow, M, Ysseldyke, J, & Wotruba, J 1993, 'Instruction in special education classrooms under varying student-teacher ratios', Elementary School Journal, 93, pp. 305-320

How to use this document

This document is intended to help practitioners use research to identify areas of need rather than to provide a definitive solution. Ysseldyke and Christenson's 'twelve components of effective instruction' are presented with descriptive criteria that can be individually graded in order to produce a picture of the instructional environment as a whole.

Whilst the purpose of the original article was to provide a methodology for assessing the instructional environment of individual pupils, particularly with special educational needs, this guide is written with the intention that it is flexible and can be used in a variety of ways. These could include self reflection, in combination with keeping a research diary, use in pairs/triads/, or with pupils. In keeping with the original intentions of the research it is not designed to assess teaching, groups of students beyond the single classroom or compare large populations of students.

Using the guide

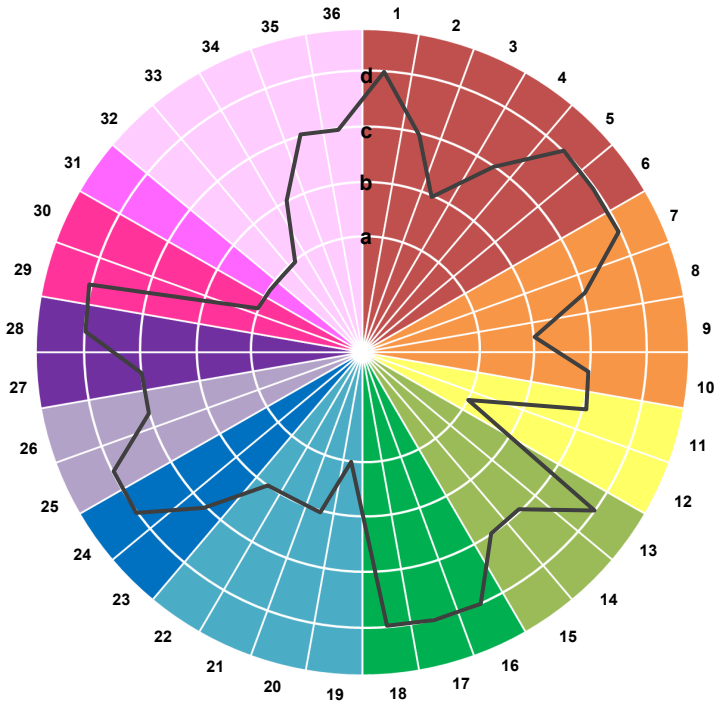
To use the guide, work though each of the components (individually/in groups/with students) and grade how you feel the environment meets the criteria for your target student/s. You can then plot the results on the radar chart provided to gain an overview of areas you may wish to focus your enquiry on.

As the original research was developed to be used with SEND pupils there may be some elements that you feel are not as relevant to your setting. Equally, there are some areas of overlap within the components. It is up to you how you complete the charts and whether you wish to include all of them.

Within the components there are few specific recommendations of *how* to achieve each element. This will hopefully allow the document to remain relevant for longer and practitioners can carry out more focussed investigation into the areas that are identified by this assessment.

There is no set way to make use of this but hopefully it will allow you to use research to frame your work more systematically. It should act as a way to identify the starting point for enquiry, whether that's in the closed classroom, over a wider group or department.

It is not a definitive source of information and there will be always new research that can be added to meet needs. This will hopefully help you to do what you're already doing, but do it better.



Descriptive Criteria

Instructional Presentation

		Almost Never	Not often	Often	Most of the time
1	Instruction is presented in a clear and specific manner.	a	b	c	d
2	Goals of instruction are clearly communicated.	a	b	c	d
3	Directions contain sufficient information for the student to understand what kinds of behaviours are to be demonstrated.	a	b	c	d
4	Directions contain sufficient information for the student to understand what kinds of skills are to be demonstrated.	a	b	c	d
5	Student understanding is checked before independent practice.	a	b	c	d
6	Expectations for student performance are clear and specific.	a	b	c	d

Classroom Environment

		Almost Never	Not often	Often	Most of the time
7	The classroom is controlled efficiently and effectively.	a	b	c	d
8	There are well established and efficient instructional routines.	a	b	c	d
9	There is a positive, supportive classroom atmosphere.	a	b	c	d
10	Time is used productively.	a	b	c	d

Motivational Strategies

		Almost Never	Not often	Often	Most of the time
11	Strategies are implemented for heightening student interest and effort.	a	b	c	d
12	Strategies are implemented to foster student achievement.	a	b	c	d

Teacher Expectation

		Almost Never	Not often	Often	Most of the time
13	There are realistic yet high expectations for the amount of work to be completed.	a	b	c	d
14	There are realistic yet high expectations for accuracy of work to be completed.	a	b	c	d
15	Expectations are communicated clearly to the student.	a	b	c	d

Relevant Practice

		Almost Never	Not often	Often	Most of the time
16	Students are given adequate opportunity to practice with appropriate materials.	a	b	c	d
17	Independent student practice is directly relevant to the lesson presentation or guided practice.	a	b	c	d
18	Classroom tasks are clearly important to achieving instructional goals.	a	b	c	d

Academic Engaged Time

		Almost Never	Not often	Often	Most of the time
19	Students are actively engaged in responding to academic content.	a	b	c	d
20	Student attention is gained during presentation and maintained through adequate pacing.	a	b	c	d
21	The teacher monitors the extent to which students are actively engaged.	a	b	c	d
22	The teacher redirects students when not engaged.	a	b	c	d

Progress Evaluation

		Almost Never	Not often	Often	Most of the time
23	There is direct, frequent measurement of student progress toward completion of instructional objectives.	a	b	c	d
24	Data on pupil performance and progress are used to plan future instruction.	a	b	c	d

Adaptive Instruction

		Almost Never	Not often	Often	Most of the time
25	The curriculum is modified to accommodate students' specific instructional needs.	a	b	c	d
26	The skill/content taught is practiced in varied ways or with varied materials to facilitate generalisation.	a	b	c	d

Instructional Planning

		Almost Never	Not often	Often	Most of the time
27	Student needs are assessed accurately.	a	b	c	d
28	There is a good match between student's instructional needs and instruction delivered.	a	b	c	d

Student Understanding

		Almost Never	Not often	Often	Most of the time
29	Students demonstrate an accurate understanding of why the assigned work is important.	a	b	c	d
30	Students demonstrate an accurate understanding of progress toward mastery of the instructional objectives.	a	b	c	d

Cognitive Emphasis

		Almost Never	Not often	Often	Most of the time
31	There is explicit communication of what the student is to think about when solving problems or performing the assigned task.	a	b	c	d

Informed Feedback

		Almost Never	Not often	Often	Most of the time
32	Students receive relatively immediate and specific information on performance or behaviour.	a	b	c	d
33	When students make mistakes, correction is provided.	a	b	c	d
34	Feedback is explicit regarding the accuracy/ inaccuracy of the student's responses.	a	b	c	d
35	Upon completion of an assignment, the student receives immediate knowledge of results.	a	b	c	d
36	Homework is assigned and reviewed with the student.	a	b	c	d

Record of Evaluation

Pupil:	Class:
Subject:	Date:
Notes: