

Using the Traffic Lights Toolkit with postgraduate speech and language therapy students in preparation for placement

What need or issue was the TLT created to address?

I was programme director for post graduate, pre-registration students on a two-year intensive master's programme for speech and language therapists. These students, who come from a wide range of backgrounds and educational contexts, were required throughout the duration of their programme to complete three periods of placement in clinical settings in order to become eligible for professional registration. These placements are significant for student learning as they provide a context for professional knowledge and skills to develop in real life contexts, as well as requiring the integration of theory to practice. However, despite the evident academic skills, life experience and transferable skills they brought to this current context, when it came to preparation for this key learning experience many students experienced anxiety and low levels of confidence which were sufficient to undermine their ability to engage constructively with the learning opportunity. My mistake was how I approached supporting them. I tried to do things to that I thought would be helpful: being empathetic, questioning, problem-solving, and taking responsibility for providing them with all the information and resources and encouragement that I could. Over the course of a two-year period, I realised that these strategies appeared helpful to them in the short term, but each time the placement preparation time came around, the same issues arose again. I had to face the fact that my helping wasn't being that helpful. As I started to reflect more carefully on what the students were saying, I began to see patterns emerging in both the types of conversations and their content; their concerns were not so much about what they were learning about, but how they felt about what they were learning; how they felt about how they were learning, and most importantly, the conclusions they were drawing about themselves as a result, which were reflected in the language they were using to talk about their learning. The recurrent topics concerned their fears about progression; their perceived ability to engage effectively with quantitative and qualitative aspects of the learning outcomes; and concern about managing low confidence, developing self-awareness particularly in relation to knowing 'how they were doing' and how they could address their learning needs. The mistake I was making was that it wasn't about me, their concerns and challenges had little to do with what I did, and much more to do with their beliefs about their learning, as often what they were experiencing and describing were very real challenges with how they saw themselves as learners.

Why was the intervention chosen for this particular context? Why was this the best way to do it?

This realisation led to understanding at a new level, that listening for and understanding how students are experiencing and representing their reality is a vital first step to supporting them in their learning. The challenge was to find a way to scaffold effective conversations that would address their expressed needs: an increased ability to self-monitor their own learning; to be aware of their affective barriers to learning; how these were influencing both their perception of challenge and willingness to articulate their individual learning needs in the broader context, and develop effective strategies to identify their individual requirements and manage their own learning. Helping individuals to reflect upon and increase their understanding of their own learning process, and learning to identify what helps them learn best, are key elements in developing autonomous learners, and the key to successful learning.

This was the beginning of a process which has spanned several years, and caused me to draw and reflect on the learning and teaching literature, my professional experience, and foundations for practice as a teacher. The result of this process has been the development of a toolkit composed of three individual tools which can be used individually or together to provide staff and students with a

flexible and adaptable resource that can be used to encourage collaborative approaches to learning and teaching, across a range of academic contexts. It has been developed with a view to being accessible to all students and can be applied to both undergraduate and postgraduate learning contexts to promote students' direct and active involvement in the learning process.

The emphasis is on encouraging students, through scaffolded conversations, to make connections and facilitating them to identify for themselves what they already know; prior knowledge and experiences that they can draw on and generalise from that will help them to connect with new learning contexts and requirements.

The Toolkit has been designed to support students in developing the ability to self-monitor their own learning and to be aware of and articulate their individual differences and learning needs in relation to the requirements of their programme of study. The three tools can be used either individually or together to support and extend different aspects of student learning, particularly the development of learner autonomy. Little (2000) defines autonomous learning as being about how the learner relates psychologically to the content and process of learning. Definitions of learner autonomy often include concepts such as

- Responsibility or ownership of outcomes (**internal locus of control**)
- Confidence in skills or ability to achieve (**self-efficacy**)
- Engagement with student-led learning (**self-regulation**)

What was the methodology/method for carrying out the local project?

The students were introduced to the toolkit and the rationale for its use and development through a lecture and associated workshop. They were then provided with a written participant information sheet and invited to participate by completing the consent form and providing copies of their work for inclusion in the study. Participation in the project was optional, but most students agreed to submit their work. The decision as to which tools they would use, how often and in which way, was left for them to consider and explore. Part of the rationale for the project was to see if and how the tools were perceived by the students as beneficial in supporting their learning.

What was the scope of the work (no. of students, staff involved, how many times)?

The project included work from a first year postgraduate, pre-registration cohort comprised of 28 students. Four members of staff were involved in supporting the students both in their preparation for, and during their placement, and so were also trained in the rationale and the process. The pre-placement tutorials were where the staff had most involvement with the toolkit. One additional member of staff was trained separately, as she was employed after the main project was completed, but had a role in tutoring students for their second placement for which students spontaneously offered additional data as they felt it might be an interesting adjunct to the original study.

AP1 1 Guidelines
3. Perception of challenge

1	Work within the local and national policies and procedures relevant to the placement setting <i>don't look like it's written on this</i>	Does the student understand and is she or he able to discuss how the SLT service operates and is delivered to clients? Does the student understand the role of the SLT within the organisation? Has the student read and discussed key points regarding the policies which apply to this service/team setting? i.e. raising and escalating concerns, confidentiality, equality and safeguarding. Has the student seen and understood the care pathways as they apply to the service? How have national policies informed the service delivery?
2	Is able to act in the best interests of the service user <i>little amount SEN school. PMLD</i>	Is the student promoting and protecting the best interests of the patient/client? Are they treated with respect and dignity? Promotes the health and safety of the patient/client as all times and takes appropriate actions to protect the rights of children. Is the student able to focus on the client's needs rather than their own? Are they aware of current UK legislation applicable to the work of their profession?
3	Maintains a high standard of personal and professional conduct and behaves with honesty and integrity <i>I can't see myself to be anything I need to read how to writing</i>	Is the student taking responsibility for their personal conduct including any care of advice provided or any failure to act/demonstrating good time keeping, behaving appropriately, demonstrating sound personal integrity? Takes pride in personal appearance and wears ID badge. Sees self as representative of the organisation and the Universities. Understands the importance of maintaining fitness to practice. Is open and honest, admits to mistakes and says sorry when appropriate.
4	Demonstrate the ability to practice in a non-discriminatory manner	The PE is looking for evidence that the student is not allowing their views about a service user or parents/carers sex, age, colour, race, disability, sexuality, social or economic status, lifestyle, culture, religion or beliefs to affect the way they are treated or the professional advice they give. Can recognise and acknowledge own prejudices and work to ensure that these do not influence clinical decisions or behaviour.
5	Ensures the confidentiality and security of written and verbal information acquired in a professional capacity <i>REIGN 715 BLE IN: PARASITIC/INFECTIVE terminology chosen by my another nurse!</i>	Respects the individual's rights to confidentiality in accordance with the law and relevant ethical and regulatory frameworks, taking account of local protocols. Discuss and observe ways in which the student should be considering confidentiality in terms of storage of notes and information, writing of notes, speaking to clients and speaking about clients. <i>if I had a responsibility I'd not</i>
6	Discusses information about individuals and organisations only to those who have a right and need to know	Does student know who reports are routinely sent to? How is information shared amongst others? Able to exchange written or verbal information outside of clinical setting without identifying client or setting. Can discuss how confidentiality is maintained.
7	Understands the need to gain informed consent	Does the student have knowledge of policies relating to capacity to consent? i.e. MCA/Best Interest / DoLS?
8	Begin to reflect upon and develop the skills required to become an autonomous professional and understand the need to exercise their own professional judgement <i>Yikes, walk up the walk. I can do this it is a work towards, about perspective i.e. @ SLT in inter context of PE's or other professionals</i>	Is the student able to work towards increasing autonomy in the clinical setting? Is able to recognise their strengths and limitations in applying their knowledge and skills e.g. level of confidence @ reporting body observation skills, information gathering. Is able to reflect upon professional and clinical situations and responds positively and constructively to feedback. Is beginning to understand the importance of reflecting upon a situation, to determine the nature and severity of the problem, and is beginning to demonstrate the required knowledge and experience to deal with the problem. Seeks support and advice. Understands and recognises referral routes appropriate to the setting. <i>I am most concerned about perspective i.e. @ SLT in inter context of PE's or other professionals</i>
9	Is able to exercise a professional duty of care	The student should be aware of their professional duty of care at each stage of therapeutic involvement with an individual. Understands appropriate referral routes.
10	Understands the need for, and is able to demonstrate, working in effective partnership with other professionals, support staff, service users, relatives and carers	Does the student understand the need to build a sustain professional relationships both as an independent clinician and collaboratively as a member of a team. Understands the need to engage service users and carers in the assessment process. Seeks out others to share information and negotiate meetings. Is comfortable in joint working situations and respects the expertise of all Health and Social Care professionals. Maintains appropriate communication boundaries. Meets with carers and successfully shares information and agrees levels of support which can be provided.
11	Understands the need for and demonstrates effective social interaction and communication skills throughout the care of the	Is the student putting the person at ease, modifying style of verbal and non-verbal communication, asking appropriate questions and responding professionally? Are they introducing themselves and asking others the name they prefer to use? Are they using appropriate professional terminology but avoiding jargon/technical terms where necessary. Are they reassuring the client before and after assessments? Develops and maintains

Green: fully understood how to go about taking these off. Some: unsure but needs can be met / observed more often?

12	Initiate and professionally engage in discussions with service users and other professionals to gather information as required by the speech and language therapist	a positive interaction. Prevents, identifies and repairs communication breakdowns. Actively listens and effectively questions. Students should be having hands on contact with clients and their carers wherever possible. Is the student using all opportunities to gather information i.e. taking language samples, observing during play or other settings? Is the student working successfully with other members of the MDT to gather and respond to information? Respects the expertise of all Health and Social Care professionals. Maintains appropriate communication boundaries.
13	Is demonstrating an ability to administer, record, score and interpret a range of published and self-generated assessment tools and is developing skills to describe and analyze clients' abilities and needs using phonetic transcription and linguistic analysis <i>Just starting about My blitz box is v. sparse My fun facade is on a low ebb.</i>	Is the student developing her confidence and skills in carrying out a range of assessments? Are they moving from a high level of dependence to independence? Are they learning from experiences or do they continue to ask the same questions? Are they accurately recording phonetic transcriptions and linguistic analyses? Are they interpreting results appropriately in the context of the presenting problems? Can the student be flexible, i.e. depart from the prepared plan. Can they record enough information of sufficient quality to make clinical judgements? Presents/describes the results of data gathered. Uses interpretation/analysis of data to attempt clinical decisions/judgements. Empowers clients and their families/carers to be involved in the assessment and self-care planning process. <i>Don't normal makes me break out in a sweat. Arrivable.</i>
14	Is demonstrating an ability to apply knowledge of communication disorder, linguistics, phonetics and biomedical sciences to the identification, assessment and differential diagnosis of a range of communication and swallowing disorders <i>I haven't confidence in it's components but allow ability of people with these!</i>	Is student relating observations, information gathered and their knowledge of taught information to practice and developing a differential diagnosis of the communication or swallowing disorder? Are they speaking with a sound knowledge base, using appropriate terminology? <i>Student using observation, information gathered - their knowledge of taught information to practice and developing a differential diagnosis of the communication or swallowing disorder? Are they speaking with a sound knowledge base using appropriate terminology?</i> Is the student asking questions and describing situations, using appropriate terminology when reporting on observations, symptoms and information gathered? If they don't know something, do they find out for themselves? Are they reading around an area where they are uninformed?
15	Demonstrate the importance of keeping accurate professional documentation relevant to the setting, including writing records under supervision <i>Practice requires to incorporate own O & R demands</i>	Is the student able to write up case history notes with reduced levels of supervision? Are they using a service format i.e. SOAP? Are they dating, timing and signing? Is the content accurate? Where appropriate, is the student able to contribute towards report writing? <i>Subjective 100% Areas/Plan</i>
16	Demonstrates a developing knowledge of how the process of assessment influences and determines the interventions for a range of communication and swallowing disorders <i>Without a less res 13 14 of course this is red!</i>	Is the student beginning to develop a rationale for intervention based on their information and assessment gathering? Can they answer questions about their decision making process? Can they write and work to session plans? Understands the importance of partnership working when negotiating planning and delivering of care to the children and their families/carers.
17	Understand the need to establish and maintain a safe practice environment	The student is aware of i.e. the lone working and infection control policies of the placement. Follows basic safety procedures. Awareness of incident reporting procedures. Protects clients/patients if there is a situation which could place them in danger (includes the conduct, performance or health of a colleague).

Red =

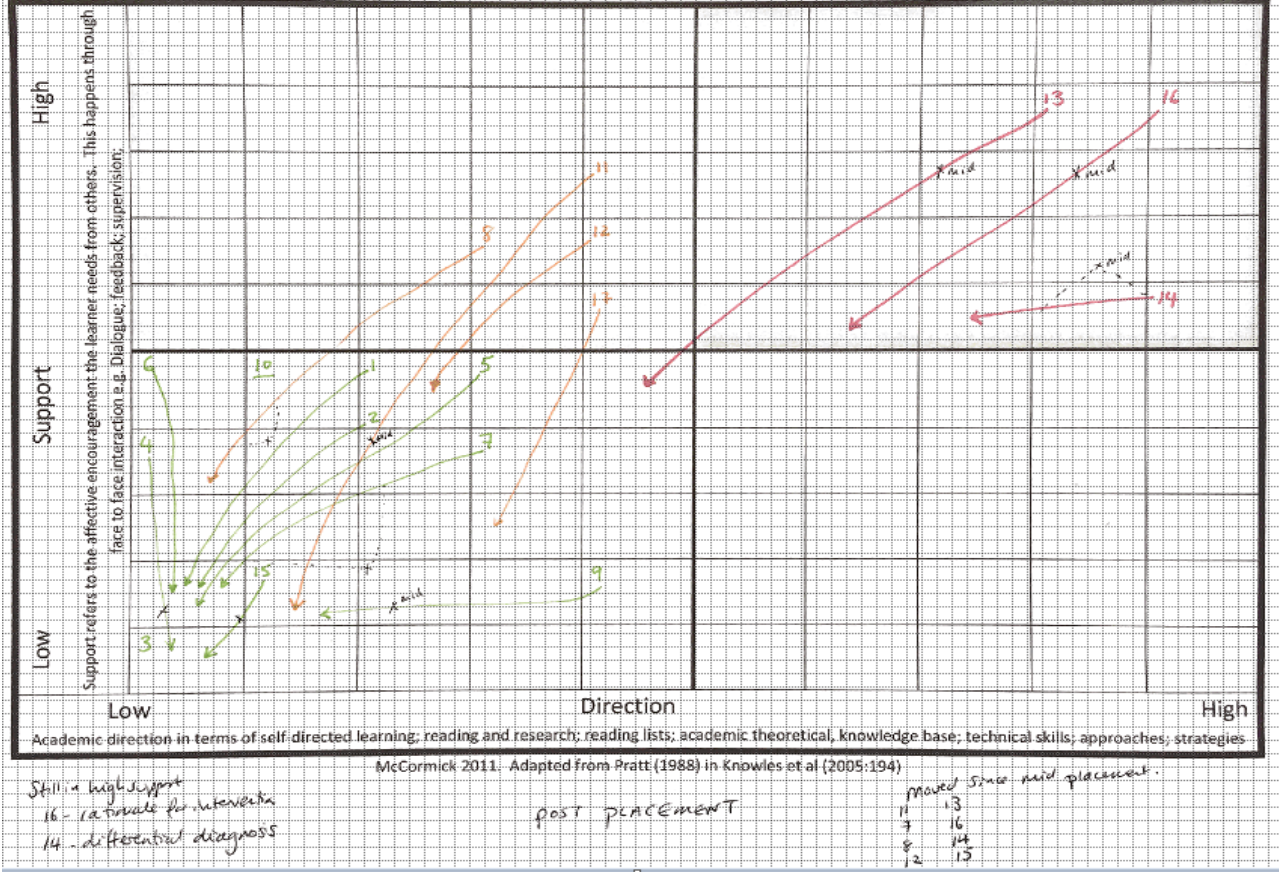


Fig 1: Examples of a Perception of Challenge Tool (top) and a Quadrant Tool (bottom) completed and annotated by students.

Rating Scales Form

Competence number (13): is demonstrating an ability to administer, record, score & interpret a range of published & self-generated assessment tools and to develop skills to describe & analyse clients' abilities & needs using phonetic transcription.

0 Nov 3 X X Then 10

1. Mark on the line where you feel you are now, where 0 = not skilled/confident etc, and 10 = very skilled/ confident. Assign a numeric value to that line
 2. Plot where you aim to be by mid-placement. Assign a numeric value to that line

Moving from...	What small next steps will I take to achieving my goal?	Moving towards...what will I be doing?
<p>What am I doing now?</p> <p>Have spent time in skills lab looking at in detail 2/3 Assessment recommended by CEd.</p> <p>Have written out 2 x self-generated assessment forms to use when observing assessment & intervention session</p> <p>practicing transcriptions from online exercises and am attempting narrow transcription in single words</p>	<p>week 1 - observing CEd's completing assessments & using my own obs sheet to document them.</p> <p>week 2 - shadow CEd in completing an assessment & decide on what part of assessment to begin in this week</p> <p>week 2 - have completed one part of each assessment</p> <p>week 3 - have completed 2 " "</p> <p>week 4 - have completed 3 " "</p> <p>week 5 - work with guidance from CEd to conduct own research into knowing how to score assess</p> <p>week 5 - Have completed 4 " "</p> <p>week 6 - Have completed most of an assessment & work with support on scoring</p> <p>week 2 - 5 transcribe at least 1 x clinical speech sample a week</p>	<p>Confidently knowing how to administer parts of not whole of the main assessment used by practice. Anxiety about conducting them reduced and feeling comfortable with conducting them & scoring.</p> <p>Talking in more detail about the nuances of the assessment & the results with CEd.</p> <p>Re: transcription increasing in speed & fluency and getting better at identifying any of the non-standard phonemes in short speech</p>

Fig 2: Example of a Rating Scale Tool completed and annotated by a student.

What is the evidence that the project was effective? Particular effects: increased self-management – it set out to do what you wanted it to do

“A key aim of learning has to be to adequately equip students with knowledge, capabilities, and personal qualities that will enable them to thrive in complex and changing contexts; this signals the importance of pedagogies that support the development of students’ self –regulation of their own learning.” HEA: Engaged student learning (2015: 7)

The students who completed the tools demonstrated considerable variety and creativity in the way in which they engaged with and used them to support their learning on placement. Responses to a questionnaire at the end of the placement, showed a range of results which provided evidence for positive changes in responsibility for and ownership of outcomes (**internal locus of control**); increased confidence in skills or ability to achieve (**self-efficacy**); and engagement with student-led learning (**self-regulation**). Students were able to both view what had changed, and articulate what they had done that had led to positive change and successful learning.

They reported:

- It helped them to look for and acknowledge changes in the areas they had highlighted
- They felt an increased sense of control over and ownership of their learning, which helped them learn to use past successes to confront current challenges
- Focusing on successes and positive change strengthened self-esteem, and encouraged an action-oriented approach to learning.

- The impact of this was that they experienced feelings of increased confidence, autonomy and independence in their learning.

These results have been replicated across the feedback methods. The quantitative data has been represented in graphs, each of which summarises the responses to individual questions from the end of project questionnaire:

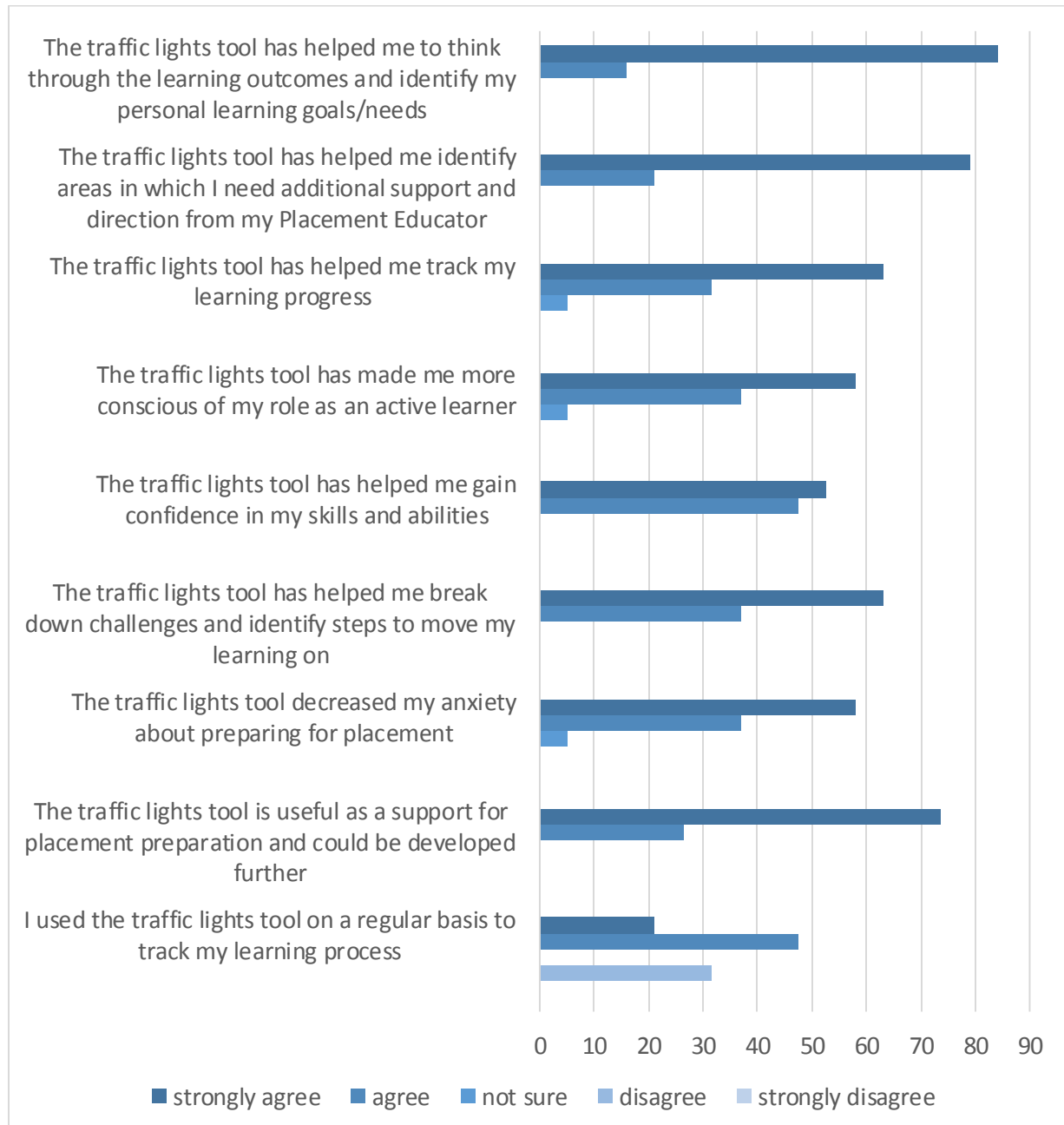


Fig 3: Student responses to end project questionnaire.

The qualitative data collected from the various feedback data has been analysed using a thematic framework. This data was collected by recording the student responses to the following questions:

1. How did you use the TLT?
2. In what ways (if any) do you feel you have benefitted from using the traffic lights tool?
3. What improvements/changes to the traffic lights system would you suggest to increase its impact on learning?
4. Anything else you would like to say/add?

Analysis allowed us to look at what the student felt the impact of using the tools had been for them, and secondly the factors they identified as to how that impact had taken place.

Table 1: Qualitative data analysis identifying themes on how change took place in students using the Traffic Lights Toolkit. Extracted from qualitative comments made by students on end of project questionnaire.

How change took place	
External representation of emotions –so they can be 'seen' and therefore engaged with Quantifying progress Revealing prior knowledge and skills Visualising of confidence levels Quantifying LNs Visual representation of LNs Visual representation of challenge Visual representation of progress Getting us to put words to fears	Externalisation
Change of perspective/ repositioning Increased perception of confidence (noticing) Clarifying expectations Identifying exceptions Reveals complexity/shades of grey/exceptions	Perspective shift
Precision targeting/focus Sorting (easy->hard) Mapping Identification of first small steps Breaking down the challenge	Mapping/Sorting/ Plotting
Self-regulation of emotional response Recognition of need for growth as part of learning process Normalising challenge	Intrapersonal change

Table 2: Qualitative data analysis identifying modes of impact on students using the Traffic Lights Toolkit.

Thematic Analysis of SLT Qualitative data		
Impact		
Reduction of anxiety reduces fear of the unknown	Reduction of anxiety	Improved self-management
Emotional/cognitive preparedness Self-regulation of learning Identifying and articulating learning needs which require external help Prioritising Clarity of focus Outcome focus Transferable tool Baseline of skills/knowledge and feelings Promotes self-reflection helps solution finding becomes more manageable	Improved self-regulation of learning	
Clarity of strengths Increased perception of confidence (noticing) Confidence building (skills/process) Self-acceptance builds confidence Safety net (perception of risk)	Improved self-perception	
Collaboration Reduction of need for support (increased autonomy Became an internal motivator Changed perception of relationship with PE Changed perception of self as learner -> active	Increased autonomy (perception of personal power)	

What is the evidence that the project has been of value?

There were a number of structured feedback opportunities throughout the lifespan of the project that allowed students to evaluate and comment on their experience of using the tools:

1. Individual questionnaire at the end of the placement: Quantitative
2. Individual questionnaire at the end of the placement: Qualitative \comments
3. Focus group – poster feedback
4. Recorded interviews from tutorials (transcribed data)
5. Video evidence
6. Individual correspondence
7. Annotated forms from their use of the toolkit

These generated a lot of information which has been included in the analyses described and illustrated in the appendices.

Students were also offered a range of feedback mechanisms within a final focus group setting; some used video and others chose to construct a poster in response to four key questions provided as a structure to explore their experiences of using the toolkit.

What is the evidence that the project has made a difference?

“Enhancing student access to learning is achieved by ensuring accessibility of ideas at the perceptual level (e.g. through the use of object-based learning, visuals) (Chatterjee 2010; Estevez et al. 2010) and at higher levels of information processing through appropriate scaffolding and the use of tools and models to support understanding (e. g. concept maps (Coller and Scott 2009; DeMeo 2007; Goldberg and Ingram 2011); and guided reflection tools (Carroll 2005; Waring and Evans 2015).” HEA: Engaged student learning: High impact strategies to enhance student achievement. (2015)

Evidence from both quantitative and qualitative feedback from students participating in this study indicate that the tools have encouraged and enhanced student ability to self-monitor their own learning, and to be sensitive to their own individual needs in relation to the requirements of the clinical context. The tools have been accessed by participating students, inclusive of age, gender, culture, educational and occupational backgrounds and adapted and annotated in individual ways which demonstrate attunement to their individual differences and learning needs.

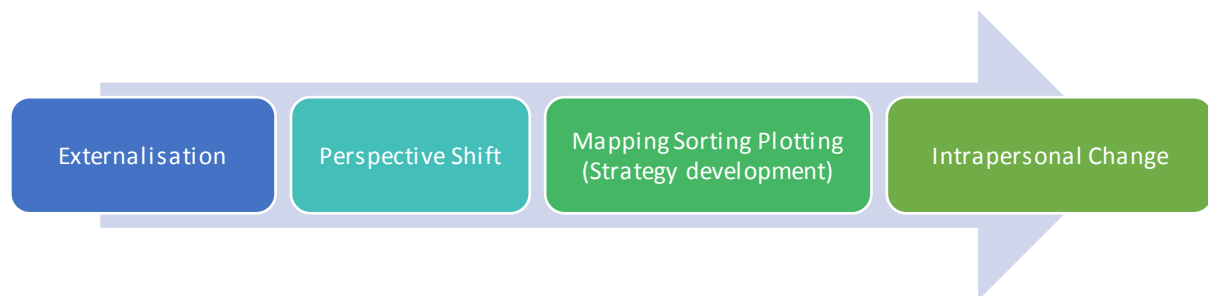


Fig 4: Arrow diagram illustrating the direction of change in students using the Traffic Lights Toolkit.

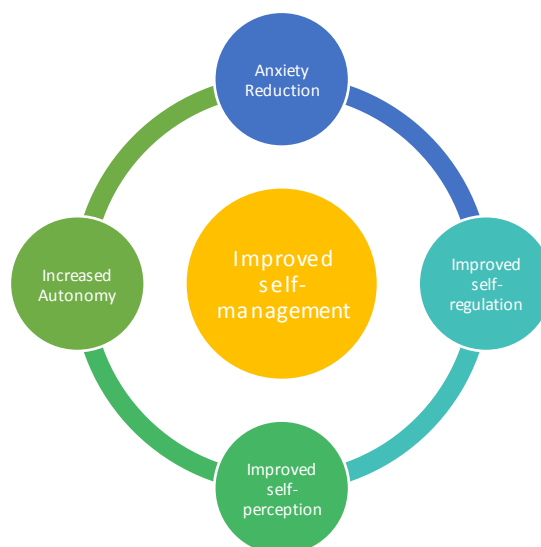


Fig 5: Diagram illustrating the modes of impact on students using the Traffic Lights Toolkit.

This suggests that the pedagogic design was sensitive and adaptive to the requirements of the context and was successful in providing a set of tools to support student self-understanding and promote increased engagement relevant to workplace contexts and real world learning outcomes. Advance access to and engagement with placement assessment materials enabled students to familiarise themselves with the learning objectives, and to prepare for learning by actively creating their own individualised documents as part of the active learning process, including the use of the tools to guide critical reflection.

Students who formed part of the original study cohort have offered the documents they have prepared in advance of placement 2, in which they have spontaneously used the materials again. Analysis of the patterns of use show that most of them have used the tools in a very similar way to last time, with some showing increased use of the tools – and commenting that they now appreciate how the additional tools work, and the benefit of them as a toolkit of resources.