Talking Mats® and The World Health Organisation International Classification of Functioning Disability and Health - Children and Youth

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A framework for helping adolescents set IEP targets

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Executive Summary

Involving young people in making decisions that affect their education can be both challenging and time consuming. A pilot study in Stirling secondary schools suggests that Talking Mats® can provide an effective solution.

This study examines whether using the International Classification of Functioning, Disability and Health - Children and Youth Version ('**ICF-CY**') can be usefully combined with Talking Mats to provide a practical framework for decision making and target setting. It tests whether:

- combining Talking Mats and the ICF-CY framework was acceptable to secondary pupils with complex needs, and
- using the information obtained from them is helpful in setting targets for their Individual Education Plans ('**IEP**').

Twelve participants with Additional Support Needs, aged between 13 and 17, were interviewed twice, in each case at least two weeks apart.

One interview used the Pupil Contribution Sheet ('**PCS**'). The PCS is the standard method used for obtaining the views of pupils in Stirling schools and is included in their IEPs. The other interview used a Talking Mat together with ICF-CY. Participants were given a questionnaire to complete after each interview to record their impression of the interview. Both interviews were videoed and the footage was then analysed. Cognitive mapping was used to identify key findings.

The objective was to compare and contrast the interviews for each participant and to assess the extent to which ICF-CY combined with Talking Mats was helpful in setting targets for IEPs.

Analysis of the findings indicates that combining a Talking Mat with ICF-CY provides a significantly more effective framework for capturing the views of adolescents than a standard interview. Together, they provide:

- ➢ a basis on which to identify problematic issues
- ➢ a wealth of information to inform decision making
- ➢ a non-threatening forum in which to raise sensitive issues
- ➢ a holistic picture of the issues affecting the pupil

An easy to use pack is being developed using the findings of this study and will be available by early 2013. It is being developed as a resource suitable for young people both with and without complex language needs.

The implementation of GIRFEC in Scotland, and the move towards interdisciplinary teamwork, will only increase the need for a pupil centred approach in supporting young people. GIRFEC will be a key driver of working practice for professionals who work with young people over the next ten years.

The challenge for practitioners is not only to listen to the views of young people but also to allow them to become more involved in making important life decisions. **Talking Mats, when combined with ICF-CY, is a powerful tool with the potential to greatly enhance the nature of partnerships between pupils, parents and professionals.**

Background

This study considers how secondary schools are involving young people with additional support needs in planning and reviewing their educational programmes.

This was investigated using two separate interview formats namely a Pupil Contribution Sheet and a Talking Mat. Talking Mats is an established communication tool that uses a mat and picture symbols as the basis for communication. The Pupil Contribution Sheet ('**PCS**') is the standard method used for obtaining the views of pupils in Stirling schools.

We asked young people to tell us which format they preferred. We also compared the quality of information that we obtained from each interview format.

The policy background

The principle of developing an inclusive society has lead policy makers to conclude that one of the best ways to promote understanding and acceptance of diversity is by creating inclusive school communities. Over the past 20 years we have seen the closure of many "special schools" to facilitate change. It is now broadly accepted internationally and in Scotland that:

> "Inclusion is about much more than the type of school that children attend: it is about the quality of their experience: how they are helped to learn, achieve and participate fully in the life of the school." (Whitehurst 2007)

Over the past 20 years secondary schools have become more inclusive and education policies have reflected this cultural shift. The Scottish Government's 'Curriculum for Excellence*'* has helped to reinforce a shift of thinking away from just delivering the curriculum, to planning and accommodating the needs of individual learners. This has dove-tailed with the implementation of "*Getting it Right for Every Child***"** ('GIRFEC')(The Scottish Government. 2010). This promotes the participation of children, young people and their families in gathering information and making decisions as being central to assessing, planning and taking action. Standards within the education profession now expect inclusion to be at the heart of a school's ethos.

Involving young people in making decisions that have a direct impact on their lives has been recognised as a sound working principle by policy makers for many years. Indeed, in 1991 the United Nations Convention on the Rights of the Child (UNICEF, 1991) was ratified in Scotland and since then a considerable body of legislation has sought to support article 12 which states that young people have :

> "a right to be heard and have their views taken seriously in all decisions that affect their lives."

It also states that when a child does express a view this must:

> "be given due weight according to the child's age and maturity."

Recognising that the views of young people can provide a valuable contribution to decision making is reflected in the Standards in Scottish Schools (Scotland) Act 2000 (Scottish Government 2000).

requires pupils to be consulted on all school development plans and incorporates broad principles from the UN convention. ('*Participants not pawns*') (Scotland's Commissioner for Children and Young People, 2010). Treating consultation as merely a legal requirement that must be fulfilled is to focus on the letter of the law and not the spirit of the law.

As highlighted in the Commissioner's report:

> "treating this consultation process as a chance to both learn from pupils' insights and to exhibit respect for them is better adult behaviour than treating it merely as a legal obligation to be completed perfunctorily."

Increasing participation is immensely valuable to young people and to the wider school community. There is a wide range of literature which supports this.

Learning to listen and respond to the views of our young people can have considerable benefits, as outlined by Thomas 2009.(Thomas 2009):

> "Allowing a child to exercise some control over what is happening to him or her will in itself have psychological benefits for the child's development".

Thomas also advocates the need to provide a supportive structure because:

> "a child's ability to engage with decision-making will increase with practice."

We want young people to be able to participate confidently and effectively and to be assured that, at the end of the consultation process, an accurate record of their views has been acquired (Cameron 2008). Harry Shier's model of participation (Shier 2001) is based on five different levels of engagement depending on the weight given by adults when taking views into account. These are:

1. Children are listened to.

2. Children are supported in expressing their views.

3. Children's views are taken into account.

4. Children are involved in the decision-making processes.

5. Children share power and responsibility for decision-making.

Perhaps the readiness of young people to give their views has a direct bearing on how much their views will influence decision making.

In order to help young people make informed choices and decisions there is a developmental progression from learning how to voice an opinion to sharing the responsibility for making a decision. Post school transition success can be affected by the support for personal decision making that is provided in schools when progressing through the system. Participation should be meaningful and ongoing for all pupils.

> "Consultation and participation will be successful if children and adults have developed and practised the skills of consultation and participation over the years."

Special Education Needs Toolkit section 10 (Department of Education and Skills 2001).

This study looks at the quality of involvement of young people with complex needs when making decisions about their targets in their Individualised Educational Programmes ('IEPs')

Individualised Educational Programmes

Individualised Educational Programmes are defined as being:

> "written plans outlining steps to be taken to enable children/young persons with special educational needs to achieve specified targets. An IEP provides the planning framework which underpins the teaching and learning process by which a child's special educational needs can be addressed."
>
> Manual of Professional Practice in Meeting Special Educational Needs (Scottish Government 2004).

An IEP:

- contains the targets to be achieved by the child/young person over a set time period; and
- outlines the strategies resources and supports necessary to achieve these goals.

There are a number of critical components to the IEP process including:

- assessment
- gathering information
- involving parents
- team collaboration
- reviewing targets

This study focuses on the involvement of pupils in the IEP process. In recent years pupils have been encouraged to attend and participate in meetings that make decisions about them. IEP review meetings evaluate and review the previous plan before formulating a new one. Individual schools vary significantly in how the IEP is managed. In some schools the locus of control still lies with the teacher who sets individual targets. This does little to promote inclusive practice in the classroom:

> "Pupils often do not know what their targets are and may not be involved in setting or reviewing their progress against them." (Frankl, 2005)

Furthermore Frankl suggests that:

> "Progress for pupils with SEN was often measured narrowly in relation to their performance against IEP targets, rather than progress in their overall learning to include learning other than in literacy, numeracy or behaviour."

A study in Ireland reported that 50% of teachers included the pupil in the formulation of the IEP but only 15% of the pupils received a copy. (McCarthy 2006, cited in Prunty, 2011) (Prunty 2011).

Other schools ensure that young people's views are obtained and taken into account before a decision is made. Shier (2001) equates this to level 3 participation and suggests that this should be the minimum requirement according to UNCRC.

Different schools use a variety of methods to obtain the views of young people when preparing to review their IEP targets. This study focuses on the methods that are used within Stirling Education Authority. The Pupil Contribution Sheet (PCS) is reproduced in the Appendix.

The International Classification of Functioning, Disability and Health (ICF) and its version for children and youth (ICF-CY)

The ICF is a classification system developed by the World Health Organisation to provide a common framework and language for describing health and health related states (World Health Organisation 2001).

The ICF and ICF-CY are universal in the sense that they can be used to describe the functioning of all people, not only those with a disability. The rationale for developing the ICF was to provide a way of describing the functional impact of a health condition. It contains hundreds of different codes or issues to consider. The codes describe the actual health condition, and the functional impact of that, for each person in their own unique environment.

The ICF-CY is a derived version of the International Classification of Functioning, Disability and Health for the adult population (WHO, 2001). The need to develop a version of the ICF for children and youth was based on the fact that significant developmental changes occur from birth to 17 years and a framework to record these developmental stages was required as well as a way of recording the influence of the surrounding environments (WHO, 2007)(World Health Organisation 2007). The ICF-CY has been compiled by an international group of scholars and has an emphasis on promoting quality of life. It describes the factors that cause difficulties for the child in meeting the demands of daily living.

The functional impact of a disability on a child will differ significantly to the functional impact on an adult or youth and it is useful to be able to reflect that. (Simeonsson et al. 2006). The ICF-CY gives practitioners a useful framework:

> "When used in assessment the ICF-CY allows for new areas of assessment and provides a comprehensive picture of a child". (Ibragimova et al. 2009)

Talking Mats

Talking Mats ('**TM**') is an established communication tool that uses a mat and picture symbols as the basis for communication. It is designed to help people with communication difficulties think about issues and provides them with a way to effectively express their views visually (www.talkingmats.com).

Aims and Research Questions

This research investigates the following:

1. How acceptable will using the adapted Talking Mats framework be, compared to the Pupil Contribution Sheet, for young people with complex needs in mainstream secondary school?

2. Will using the adapted Talking Mats framework help young people generate their own targets and improve the quality of their involvement in the process?

Methods

Ethics

Forth Valley Research and Development Committee accepted the study. East of Scotland Research Ethics Service gave ethical approval and NHS Forth Valley acted as Sponsor for the research.

Recruitment

A letter and information pack was sent to the Head of Education in Stirling Education Authority to obtain consent to work in the participants' own schools. This was received prior to recruitment.

Stirling Education Authority has seven secondary schools. They all accommodate and provide support for young people with Additional Support Needs. To obtain a diverse sample, invitations to participate were sent to therapists in all seven schools. The therapists were asked to identify pupils from S1 to S6 who receive support from a number of different agencies and have complex needs requiring professional support throughout their school life. The pupils did not have to be currently on the Speech and Language Therapy caseload but they did need to have an IEP. Participants were to be excluded from the study if they:

- had a significant visual impairment

- were medically unwell

- did not wish to take part.

They also had to have a level of comprehension of two information carrying words or above in order to be able to use a Talking Mat. (Murphy et al. 2004)

The researcher then sent out a letter to Speech and Language Therapy colleagues asking them to identify suitable participants for the study and to send out a letter of invitation to take part in the project. The return slip indicating interest was then sent back to the researcher.

A home visit was arranged to allow the researcher to meet the parents and the young people involved. A project information sheet outlining the scope of the study was given to the parents and an accessible version was given to the young people. The researcher explained the background to the study and demonstrated how a Talking Mat is used and how the interviews would be conducted.

Time was allowed for discussion and for questions to be raised. Consent forms for the parents and assent forms for the young people were left for signing. They were asked to return them to the researcher within a week if they were happy to participate in the study.

Participants

Fifteen return slips were received and the researcher followed them up with a home visit. One parent met to discuss the project but had some reservations regarding his 15 year old participating. Although he initially decided to give consent, he subsequently withdrew it.

In the other two cases written consent was not received. Twelve participants were recruited for the study.

The participants included were:

Gender	Age Category	Diagnosis	Number of schools
Male: 9 Female: 3	S1-3: 5 pupils S4-6: 7 pupils	* Autism Spectrum Disorder (ASD): 6 * Moderate Learning Disability :6	5

Procedure

Following consent, the interviews were arranged at the participants' own secondary school. Each participant was interviewed twice, once with the Talking Mats framework using the ICF CY symbol sets and again using the Pupil Contribution sheet.

Both interviews were videoed to allow for analysis and observation. On first meeting the young person was asked to select an envelope from a choice of two to decide which interview would be conducted first. This allowed for the order to be counterbalanced taking account of the possible influence from one interview to another. One group had the Talking Mats interview first and the other group had the Pupil Contribution interview first.

After the interview the participants were asked to complete a short questionnaire using an adapted version of the 'Involvement Measure'. This is an adapted version of a measure used successfully by Joan Murphy in previous research projects. It is written in plain English with visual clues to make it accessible for young people with complex needs. It was used to find out how they felt the interview went. The researcher was not present while they completed the questionnaire and used professional judgement on whether or not the questionnaire could be completed alone. If not, it was completed with the help of a teacher or Support for Learning Assistant ('**SLA**').

An appointment was made to visit again to conduct the second interview. All interviews were arranged to take place at least two weeks apart.

Materials

The development of a symbol set

The researcher developed a symbol set to use with the Talking Mats framework. The selection of a suitable symbol set was based upon the WHO-ICF-CY. Although using Talking Mats with the WHO-ICF domains has been used successfully in helping adults set goals in a rehabilitation setting (Boa et al. 2003) it was necessary to adapt the symbol set for this project to make it relevant to the needs of adolescents.

The ICF-CY has produced a number of Developmental Code sets (Ellingsen et al. 2011). The Developmental Code set for children 13 through to 17 years has 58 codes and was "developed by consensus from a diverse, international group of experts."

It provides a practical tool to elicit information relevant to this age group. The researcher selected a symbol set that mirrored the information in the ICF Questionnaire-CY (>13 years).

1. **Body Functions**: How does the young person feel about the physiological functions of their body?

2. **Activity and Participation**: How does the young person feel about their ability to carry out specific tasks or actions and how do they feel about their ability to take part in a variety of situations?

3. **Environmental factors**: What are the issues which make up the physical, social and attitudinal environment in which the young person lives?

ICF-CY Domains	Number of codes	Number of symbols
Activities and Participation	23	19 symbols
Body Function	16	16 symbols
Environmental Factors	18	15 symbols

The number of symbols used was less than the number of codes to reduce the interview time. The codes were excluded if they were:

- used in more than one domain, for example family relationships; or
- closely related and could be combined into one symbol for example helping to make meals and doing the housework was combined into "home life"

Pupil Contribution to the IEP

Before reviewing an IEP in school teachers interview pupils using a standard form called the '*Pupil Contribution to IEP*' (see the Appendix) to obtain the views of the young person. It is used by teachers to record the following:

1. The things the pupil enjoys and is good at.
2. The things the pupil would like to improve and like help with.
3. What new targets the pupil could work on.
4. Possible problems to achieving targets.
5. Who could help them achieve targets and how could they do this?

This is used to help inform decision-making when writing new targets for the next block of work. The researcher used this form when conducting the interviews.

The researcher presented the project to the Additional Support Needs (ASN) teachers in Stirling and asked for feedback. They suggested a couple of points relating to the symbol set and the researcher adapted the set accordingly. They suggested asking about rights and responsibilities rather than systems and policies in the Environment section. To gain information about sensory sensitivities, the symbols relating to allergies, hearing and sight were all included in the Body section.

A small group of six secondary pupils with ASN (who were not participating in the project) were also asked to comment on the symbol set to ensure no information had been omitted. They gave positive feedback and the symbol set was finalised.

An interview was conducted with a Headteacher who had previously worked in Forth Valley to understand some of the barriers and constraints in pupil consultation. The main issues highlighted were:

- balancing resources across a diverse population
- providing sufficient opportunity for experiential learning
- achieving partnership with parents.
- multi-agency working to include joint assessments, and
- staff training

Although, parent involvement is a critical component to successful IEPs (Stroggilos et al. 2006) parental feedback was not obtained due to the time constraints of the study.

Analysis

Question 1: Will using the adapted Talking Mats framework be acceptable to young people with complex needs in secondary schools?

Quantitative Analysis for Question 1

To obtain quantitative data, an adapted version of the Involvement Measure was used. The Involvement Measure was developed by Murphy in a previous study. (Murphy et al. 2010)

It has six questions; the first five questions ask the individual to rate their responses on a four-point scale. The final question asks the respondent for an overall rating of how well the conversation went on a seven-point scale. All the questions and the scale were symbolised to make the information accessible to the user.

The aim of the questionnaire was to compare how acceptable the conversation was to the young person when using a Talking Mat compared to using a Pupil Contribution sheet. It asked for a rating of the following information.

1. Important issues covered
2. Feeling listened to
3. Ability to express view
4. Time taken
5. Involvement in target setting
6. Overall rating.

To analyse the quantitative data a numerical value, 1 to 4 was given to each point on the evaluation form 1-(poor) to 4 (excellent). Mean values were then produced for all five areas to give a measure of the acceptability of each interview technique. Question 6 was rated on a seven point scale 0 (interview did not go well at all) to 6 (interview went very well indeed).

Qualitative Analysis for Question 1

Field notes were taken after the young person completed the questionnaire to emphasise specific issues relevant to each pupil. Notes were taken commenting on comprehension and engagement levels as reported by the teacher or SLA.

Question 2: Will using the WHO-ICF-CY improve the quality of the involvement of young people with complex needs in setting targets for their IEPs?

Quantitative analysis for Question 2

The video footage of both interviews was analysed using an adapted version of the "Effectiveness framework for functional communication."(EFFC) (Murphy et al. 2008).This is a framework that measures the quality of an interaction based on a variety of different modalities. Each modality is scored using a five-point scale: 4 (always present) to 0 (never present). Cognitive mapping was also used to identify key findings.

The interactions were then judged based on the following indicators.

1. Participant's understanding the issue for discussion.
2. Participant's engagement with the interviewer.
3. Researcher's ability to set new targets based on the information obtained.
4. Participant's ability to stay on track (non-verbal information was particularly helpful here)
5. Symmetry – the balance of the interaction between researcher and participant.
6. Chill factor- researcher's perspective of maintaining the interaction.

The researcher obtained a score for all 12 participants. Two independent SLT observers then chose a sample of three participants and scored the data without knowing the researcher's scores to check how reliable the scores were. A percentage agreement was then used to calculate the inter-observer reliability. This was found to be 90%

According to Aspland (Aspland et al. 2003) 70% is generally considered to be an acceptable level of agreement between observers, since a high level of reliability was established, the researcher then proceeded to rate the remaining interviews.

Qualitative analysis for Question 2

The researcher also looked at the data in an exploratory fashion to identify themes emerging by using a cognitive mapping approach. The data analysed included:

- knowledge of previous IEP targets
- the respondents level of language functioning.
- the respondents ability to generate targets
- the usefulness of the symbol set.

Results

Question 1: Will using the adapted Talking Mats framework be acceptable to young people with complex needs in secondary schools?

Quantitative Results for Question 1

The Involvement Measure was used to compare the **acceptability** of each type of interview, as illustrated in Figure 1 below**.**
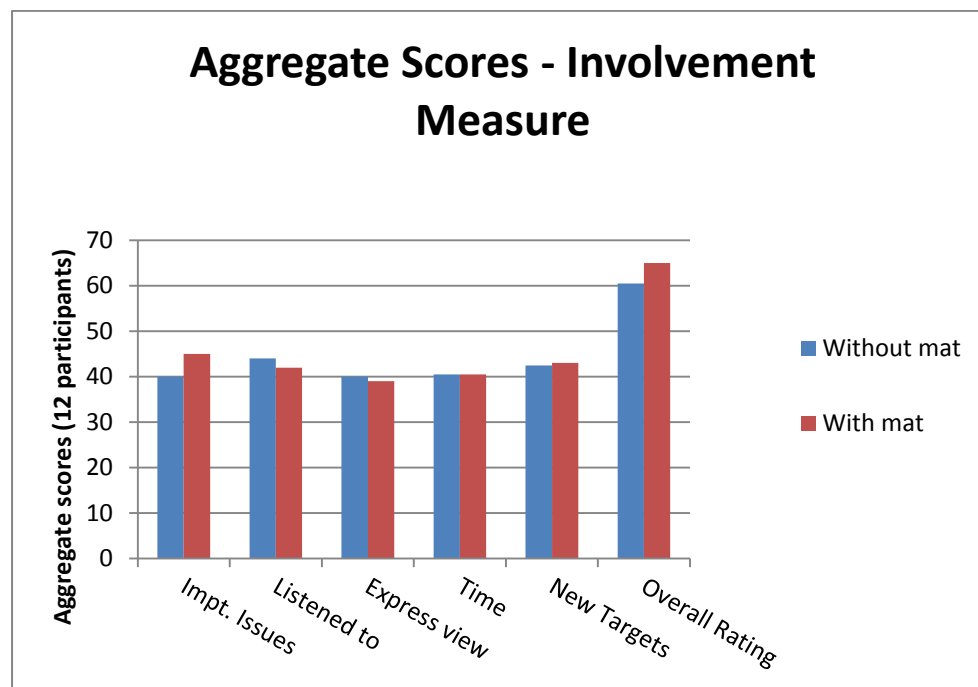

Figure 1 – Aggregate Scores, Involvement Measure

The **number of issues covered** was greater with the TM interview and so gave an opportunity to ask about a range of subjects that were missing in the PCS.

The **time allowed to express a view** was sufficient for both. The actual time taken for both interviews was almost the same. Although the TM interview asked for a lot more information, many participants took time when writing their responses on the sheet.

The feeling of involvement in **setting new targets** was not significantly greater when using a Talking Mat.

All scored **feeling listened to** and **ability to express a view** as acceptable for both interviews except participants 4 and 10. Participant 4 scored very low for both of these questions after the TM interview.

The young people were asked to rate how well they felt the conversation went on a scale of 0 ('not well at all') to 6 ('very well indeed').

The results indicate that on average the young people **preferred using a Talking Mat to conducting a structured interview.**

Qualitative Results for Question 1

Participant 10 had severe communication impairment; although he completed the questionnaire with SLA assistance she was not sure his level of comprehension was sufficient to give an accurate measure. Participant 4 co-operated fully during the interview but lost motivation to complete the questionnaire as it was almost lunch time. He also completed it with SLA support but did so in a rush and his SLA was unsure if it would be truly reflective of his views. Four participants completed the questionnaire independently and eight with adult support.

Question 2: Will using the WHO-ICF-CY improve the quality of the involvement of young people with complex needs in setting targets for their IEPs?

Quantitative results for Question 2

The "Effectiveness framework for functional communication." (EFFC) judged the **effectiveness of both interactions** and Figure 2 below illustrates that the TM interview was a much more effective interaction.

Overall the **effectiveness** of using a Talking Mat, evaluated as the total combined scores as a percentage of the maximum possible score, was 91%. This compares with only 70% effectiveness when Talking Mats were not used.

Figure 2 below illustrates the effectiveness of the interaction over six indicators. Each acronym is explained below.
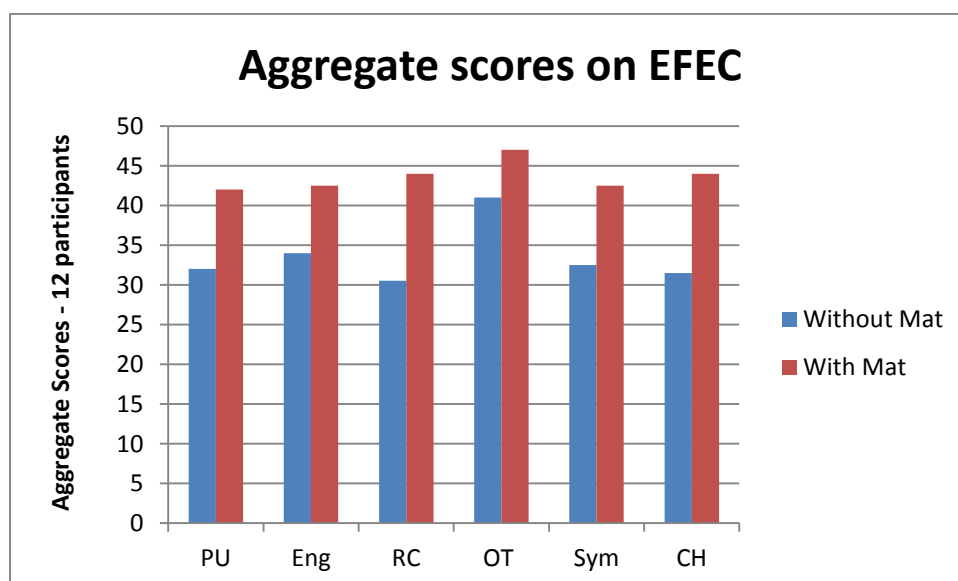

Figure 2 - Aggregate scores on EFEC

1. **Participant's understanding of the issue for discussion ('PU')**

This was judged according to how well questions were responded to and symbols understood. It highlighted the fact that, for many of the participants the level of questions being asked on the PC sheet was too complex and required abstract reasoning out with their cognitive ability. Some of the symbols were ambiguous and difficult to understand for example self-care, which includes washing and dressing, was misunderstood as meaning "taking care of yourself and living independently." Safety, understanding the danger of drugs and alcohol, also caused some confusion.

2. **Participant's engagement with the interviewer ('Eng')**

By noting the participant's ability to establish a rapport through purposeful and controlled eye contact, facial expression and posture, the TM interview engaged the student more successfully.

3. **Researcher's confidence in student's ability to set new targets based on the information obtained ('RC')**

The scoring of this section was based on the confidence of the researcher that the information received from the interview informed target setting. Two students completed their mat and identified problems but were unable to generate goals during the session.

Participant	Knowledge of Previous Targets	Number of new targets generated with PC sheet	Number of new targets generated with TM
1	No	2	4
2	No	2	3
3	No	2	0
4	No	2	6
5	No	2	5
6	No	0	3
7	Yes	2	5
8	No	2	3
9	No	2	2
10	No	1	0
11	Yes	1	6
12	No	1	2
TOTAL		19	39

4. **Participant's ability to stay on track ('OT')**

The participants were scored based on their ability to complete the task. Marks were deducted for restless or avoidant behaviour, for example standing up, fiddling with objects not related to the interview and talking about a subject unrelated to the interview process. There was less off track behaviour during the TM interview.

5. **Symmetry - the sense of shared control ('Sym')**

This was judged according to the balance of the interaction. The interviews were graded according to the student's ability to:

- take control, and
- use their language to comment; ask questions and explain their choice of symbol placement.

The amount spoken was greater and the use of language more diverse during the TM interview.

6. **'Chill factor' – the researcher's perspective of maintaining the interaction ('CH')**

This allows a final grading of how much the interviewer had to support the interaction by bringing back focus to the task and use of verbal and non-verbal prompts. The TM interview was easier to sustain and conduct.

Qualitative results for Question 2

Cognitive mapping allowed themes to emerge from the data which indicated that the ICF-CY symbol set supported participants to express a view about the issues pertinent to adolescents. The participants graded their own perception of functioning across the following domains:

- Body Function
- Activity and Participation
- Environment.

Many participants identified similar issues that they found difficult to deal with in their lives. We grouped these issues into six themes, which are illustrated in the table below.
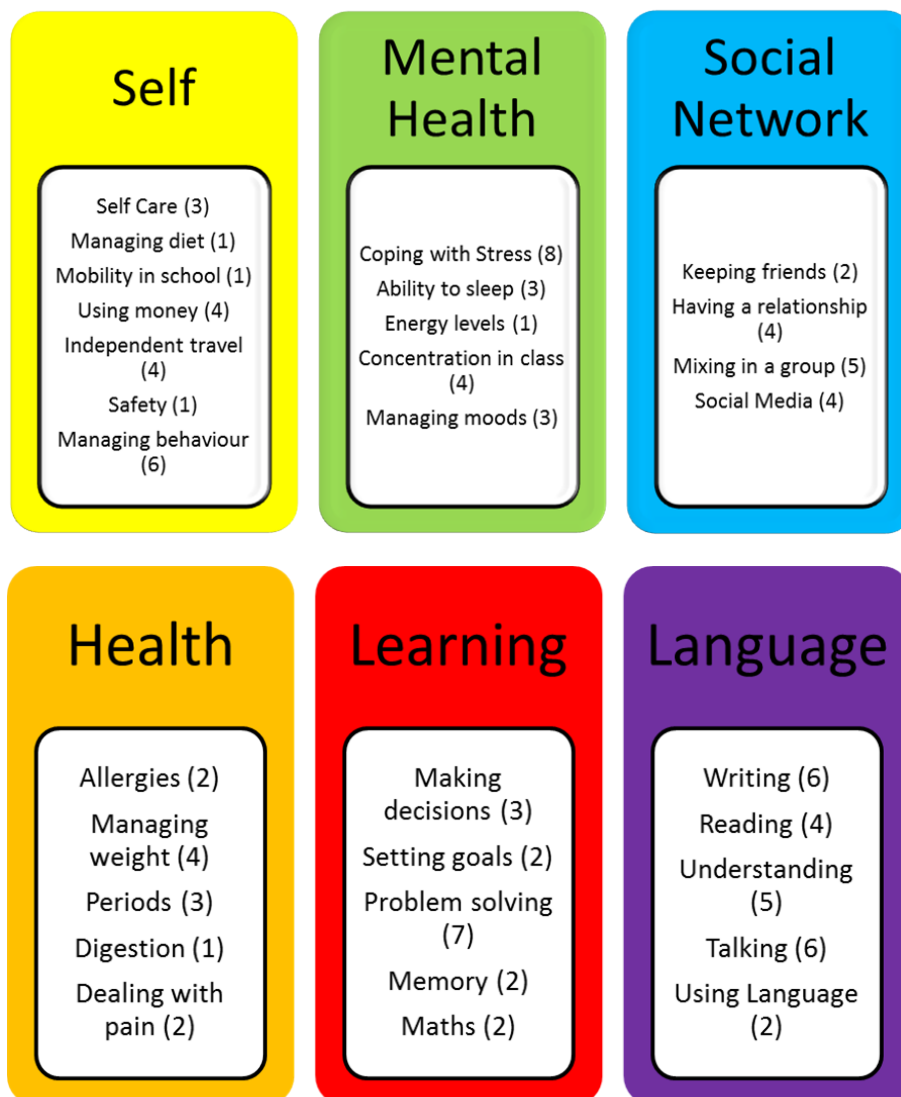
Self	Mental Health	Social Network
Self Care (3)		
Managing diet (1)	Coping with Stress (8)	Keeping friends (2)
Mobility in school (1)	Ability to sleep (3)	Having a relationship (4)
Using money (4)	Energy levels (1)	Mixing in a group (5)
Independent travel (4)	Concentration in class (4)	Social Media (4)
Safety (1)	Managing moods (3)	
Managing behaviour (6)		

Health	Learning	Language
Allergies (2)	Making decisions (3)	Writing (6)
Managing weight (4)	Setting goals (2)	Reading (4)
Periods (3)	Problem solving (7)	Understanding (5)
Digestion (1)	Memory (2)	Talking (6)
Dealing with pain (2)	Maths (2)	Using Language (2)

Figure 3 – Results of cognitive mapping of themes emerging from individual responses

Discussion

This study had two aims:

- to investigate whether Talking Mats would be an acceptable method of obtaining information from teenagers; and
- to ascertain whether the Talking Mats interview would improve the quality of involvement in setting targets.

The ICF-CY)(World Health Organisation 2007) framework provided the opportunity to explore a wide range of issues relevant to adolescents from 13-17 years. The study investigated whether asking about these issues would help to inform target setting.

What do young people feel about using a Talking Mat?

The researcher wanted to ask the young people how they felt about the way in which their views were obtained. The Involvement Measure checked their satisfaction with the Talking Mat format compared with their satisfaction with the structured interview using the Pupil Contribution Sheet.

A young person with complex needs should be given information about target setting in language they understand and a format that is appropriate for them. The results indicate that although both interviews were acceptable to the participants, the Talking Mats framework was preferred by them. Both provide a structured framework with active participation required.

When completing the Pupil Contribution Sheet the respondent is involved in completing a form and writing in responses. It is a structured interaction which is illustrated and split into sections. This provides scaffolding; it supports the questions with the written word and takes the pressure off auditory processing. If the participants had been interviewed verbally with no support, the level of satisfaction would probably have been significantly less as using a visual framework aids comprehension.

Does Talking Mats and ICF-CY symbols help young people generate their own targets and so improve the quality of their involvement in the process?

Both quantitative and qualitative results show that Talking Mats together with the ICF-CY code sets is a very useful tool for assessing and helping young people to make decisions about their future targets.

The ICF-CY symbol set enabled the young people to consider a diversity of issues compared with the Pupil Contribution sheet which focussed on literacy, numeracy and behaviour. Participants wanted to work on functional skills of everyday living, expanding their social networks, communication, health issues and strategies to improve their mental health.

The neutrality of the mat allows discussion around difficult topics as it takes the focus away from the person being interviewed and on to the mat. It is an objective framework which allows the student to think about issues in relation to each other and so consider their priorities when setting targets.

It is striking, when looking at the areas identified by the young people (Figure 3 above), how relevant the ICF-CY symbol set is when tapping into the significant issues for 13-17 year olds. Many of these issues may also have been highlighted by adolescents without complex needs.

Including information on **environmental factors** helped to clarify the negative aspects (barriers) and the positive factors (facilitators) which are significant to the young person. The majority of the participants have a very strong support network and are happy with the support they get from teachers, parents and peers.

Participants 1, 3, 5, and 10 all felt their friends didn't support them. Participant 11 felt she wasn't supported by school staff "because I need to understand what they are trying to say to me" and Participant 11 felt negative towards staff because they enforce the rules: "I hate rules and consequences-I don't cope well with consequences."

Dealing with relationships is a major and dynamic component for adolescents and can affect how they function at school. The ICF-CY allows the young person to make the distinction between the support they get from their friends and their participation in their wider life. Participant 1 commented: "I don't see my friends outside school and don't talk to them out of school." This participant placed the symbol on the negative side of the mat for Act/Part but on the positive side for support.

Body Function can have a major effect on a student's ability to access the curriculum. Participants 8,11,5,4 ,2 and 1 all had issues relating to the physiological functions of their body which were causing some degree of discomfort to the student involved and therefore impacting learning.

In the research study 75% of the young people interviewed identified "dealing with stress" as an issue. A report called "*Count Us In*" (Dittrich et al. 2008) found that in many areas of the country the mental health needs of young people with intellectual disability were not being addressed:

> "we do not have a cohesive, multi-disciplinary framework capable of delivering good mental health".

The report stresses the need for schools to be proactive in promoting and sustaining emotional well-being and positive mental health. Carpenter and Egerton (2007) state that:

> "The task of health and education services is to help …young people build a realistic awareness of their personal strengths and abilities, as well as better understanding of what their problem areas are and how they can use their abilities to compensate"

Taking time to listen to the emotional needs of young people with complex needs and having a clear strategy in place to support these needs should be a priority. Looking at the range of issues generated highlights the need for education professionals to maintain a person-centred approach. Addressing these needs by providing direct assistance, improving the communication environment and making anticipatory adjustments will help young people to reach their potential in education**.**

Setting targets for the IEPs

Only 17% of the young people in this study knew what targets they were working towards. This concurs with (McCarthy 2006) in (Prunty 2011) who noted that only 15% of pupils received a copy of their IEP. Riddell et al. (2002) in (Prunty 2011) found that pupils were not routinely involved in the development and implementation of their IEP.

Many of the participants have limited understanding and function at a concrete level. They are not able to respond to target setting because they do not understand the question being asked.

Blank et al cited in (McLachlan et al., 2010) developed a model of language development which divides language into four levels, as shown in Figure 4 below.
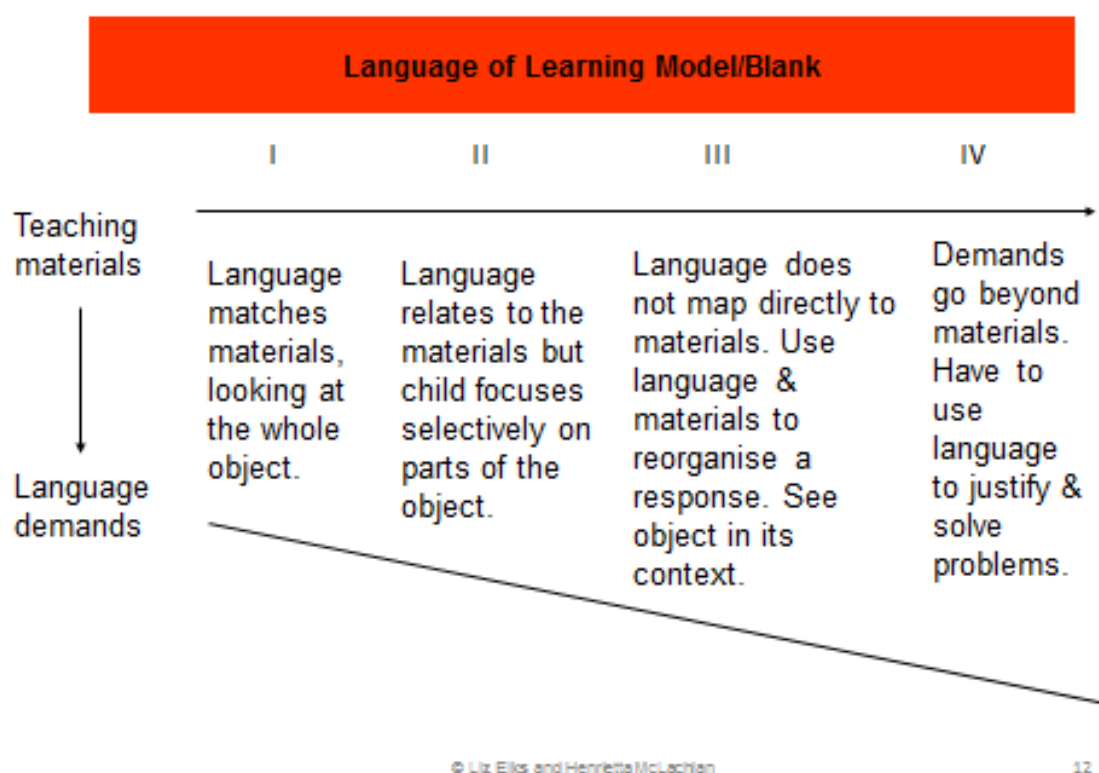
Figure 4 – Language of Learning Model/Blank

According to the *Blank Language Scheme* (Blank, Rose and Berlin, 1978) the questions being asked on the Pupil contribution sheet are Level Four questions because they ask the student to:

- **Solve a problem** – *"Targets I think I should set myself are…"* and *"Problems could be……."*

- **Justify a decision** - *"The most important things to me that I would like help with are...."*

- **Select the means to a goal** – *"who could help and how."*

Goal setting is a complex thinking task and, to help the student to succeed, the complexity of the task can be simplified by using concrete materials. Talking Mats facilitates success because it moves a Level 4 task to a Level 3 task by using the language and materials to reorganise a response.

Talking Mats can also reduce the language level to Level 2 by ensuring that:

- all the materials (symbols) relate directly to the language used;
- only concrete concepts which relate directly to a student's experience are used
- the interviewer adheres to a strict language framework.

The use of more abstract concepts such as "coping with stress", "controlling moods" or "making decisions" would be excluded from this level.

Ability to generate targets
"Sometimes quite hard, easy to set them, but hard to achieve them" (Participant 1)

The total number of targets generated by the students when using Talking Mats was over 50% greater than when using the PC sheet. The mats are helpful in identifying the issues that are problematic and are a valuable source of information for the adults involved. For some students, generating targets cannot be done in one session and a photograph of the mat can be taken, as per the example shown in Figure 5, to record views and used in a follow-up session to facilitate discussion and negotiate targets.

Figure 5 – example Talking Mat

Research and experience show that effective personal learning planning helps to raise achievement by:

- increasing motivation
- encouraging learners to take greater responsibility for their own learning
- providing a focus for a learning partnership involving learner, teacher and parent, carer

(www.highland.gov.uk/learninghere)

Conclusions, clinical implications and suggestions for future research

This study found that the sample of young people enjoyed using Talking Mats with the ICF-CY symbol set and that it improved the quality of their involvement when setting targets for their IEPs. It proved to be a time efficient means of capturing the views of young people and provided important and diverse information to help inform target setting. It is a powerful tool that can be used by therapists and educators as it provides a structured framework that can be adapted to the cognitive and communicative needs of the individual. A unique assessment tool has been created using the Talking Mats framework combined with the ICF-CY. Information was obtained across the three domains of:

- Body Functions
- Activity and Participation
- Environmental Factors

Together, they provide a holistic model which visually captures the issues that are relevant to adolescents. This tool has the potential to be used universally in schools to identify a range of issues which may be a barrier to educational achievement for all pupils, not just those with recognised additional support needs.

Clinical implications

Opening up the opportunity for young people to express their view has practical implications. Having captured the views of young people the next challenge, according to Shier's model of participation, is to let the young people become more involved in making the decisions that affect their lives.

It may be that target setting has become too narrow in many secondary schools. Support services and parents should work together with schools to support experience beyond the curriculum. Secondary schools can host the process but agencies must work collaboratively if real progress is to be made. The introduction of the Co-ordinated Support Plan marks a further shift in thinking and provides a useful framework for joint working.

The implementation of GIRFEC in Scotland hopes to change the joint working model of multidisciplinary teamwork, where each specialist assesses and intervenes, towards interdisciplinary teamwork. Assessments are carried out in cooperation with the young person and the parents. Time is taken to capture the child's own perspective and ensure they are active in developing their own learning targets. The framework presented in this study could be an important tool to enhance the GIRFEC principles since:

> " The ICF-CY can be a means for facilitating interaction between stakeholders in intervention and communication within a team" (Simeonsson et al. 2003)

"Getting It Right For Every Child" will be the policy that shapes working practice over the next 10 years as professionals, parents and young people learn to partner together.

Even within the limited terms of this study important implications for practice have emerged. A resource pack to be used in schools to capture the views of young people is being developed and will be available in the autumn of 2012. It is being developed as an assessment tool with two stages of complexity to match the language and cognitive function of the young person.

An assessment tool that provides greater coherence and continuity of targets will provide a valuable addition to transition planning.

An article has been published in The Times Educational Supplement covering the initial findings of the study.

The photographs of the Talking Mats created by the young people, for this project, will be copied and sent to all the pupil support teachers involved.

Stirling Education Authority is currently reviewing how best to capture the views of young people and the results of this study will be shared with them.

Suggestions for future Research

This study has identified the need for the following:

- Further research to explore if the Talking Mats and the ICF-CY resource would be a useful tool in capturing the views of young people without complex needs in secondary school.
- Research that explores the essence of partnership with parents in the educational process to establish practical ways of working together.

Acknowledgements

Appendix – Pupil Contribution Sheet

Appendix - Pupil Contribution Sheet

Name: Date:

1. I enjoy…

Football   pets
     socialising
Maths   family
    reading
Art   computers
   making things
PE   music
   talking

2. I am good at…

Football   listening
     socialising
Maths   laughing
    reading
Art   computers
   making things
PE   music
   talking

3. I would like to be able to…

read better   get good grades
    keep my temper
do Maths   get on with people
    listen better
draw   learn my tables
   write neatly
go to college   go to all my classes
   spell better

4. I like learning by…

Listening ☐   Seeing ☐

Doing ☐   Other ☐

5. The most important things to me that I would like help with are…

6. Targets I think I should set myself are…

7. Problems could be…

8. People who could help & how (eg teachers, friends)…

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