

Speech–Language Therapy Services in Education

LANGUAGE FOR LEARNING LANGUAGE FOR LIFE

“DEVELOPING A COMMUNICATION COMMUNITY AT NARBETHONG STATE SPECIAL SCHOOL”

Narbethong State Special School provides specialist teaching for students with visual impairment and additional disabilities. The school caters for students from birth through the Early Childhood Developmental Unit through to graduating senior students at age 18 through the school program. Narbethong State Special School has a whole school approach to learning and the students are immersed in Active Learning – a pedagogy developed by Dr. Lilli Neilsen specifically for students with visual impairment. The philosophy of active learning is to give the child the opportunity to learn, and so step by step, achieve the pre-requisites that would enable learning at higher and higher levels.

BACKGROUND

Over several years, it became apparent that while Active Learning provided many positive learning opportunities for the students, there were significant difficulties when trying to establish communication systems for our students who not only had a visually impairment but also had additional disabilities of complex communication needs and severe physical needs.

The assessment tool for Active Learning, the Functional Assessment Scheme, is an in depth, highly detailed and specific measuring tool across many areas of child development. However, it is developmentally based.

In 2014, discussions were held with the administration team regarding the need to change the culture and belief systems in the school. These discussions were based on the following:

- The general feedback was that staff had difficulty in recognising where students could be placed on the General Capabilities Curriculum-Literacy Learning Module
- A survey on communication was given to staff in 2014 and most staff did not know about formal communication systems; it was felt that students from Narbethong should only leave school being able to use a yes/no if physically possible and that a student’s communication goals still concentrated on vocalisations
- Staff’s strong belief that a student’s communication ability and cognitive ability was related to their level attained on the Functional Scheme regardless of the physical capabilities/challenges due to their cerebral palsy.

During 2014, the EQ PT, Kym Morris, had provided PD to staff on cerebral palsy and the effects the limiting movements have on development but also decided to ask Lee Withall, AVT-PI to speak to the teachers. Lee Withall is a highly experienced teacher and has many years working with students with cerebral palsy in the class room and has spent time working with CPEC Victoria (Cerebral Palsy Education Centre). Lee is also highly experienced in working with students with complex communication needs. She was able to not only reinforce Kym Morris’ message but introduce staff to the concept that our students are **“not developmentally delayed but developmentally different”**. **This related to movement (students with CP) i.e. movement being ‘different’ rather than ‘delayed’**.

This was to be one of the major building blocks of our cultural change program.

Over the years, the DET SLP had presented many PD sessions to the staff but could not provide the impetus for change and the time allocation was insufficient to provide the change, maintain the change and provide resources required for change.



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At the end of 2014, the administration team decided to apply for funding to begin a communication project. Our aim was to-

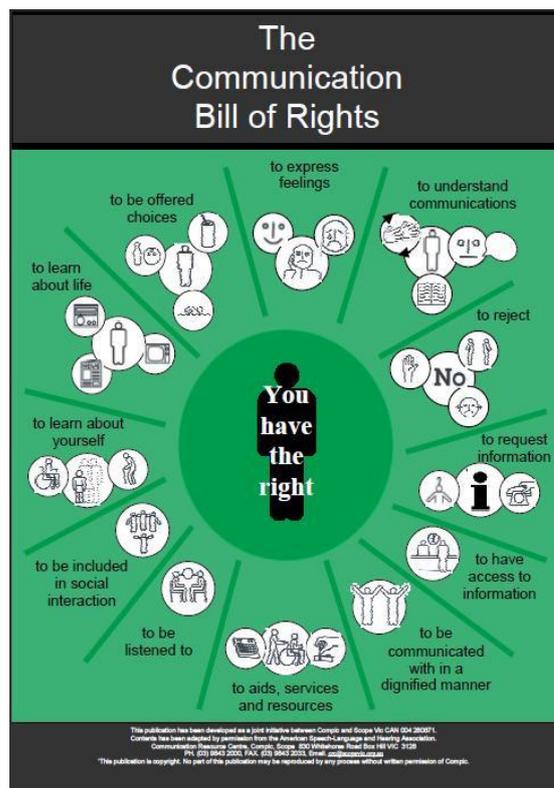
“Begin the Changes Needed To Develop a Communication Community”

Outcomes for all students are to establish effective language learning environments where highly focused interactive communicative opportunities occur. Individuals with complex communication needs and especially our students with complex additional needs are at significant risk in many aspects of their development:

- Communication
- Language development
- Cognitive development
- Literacy development
- Social participation
- Access to education
- Increase in frustration and poor behaviour regulation
- Poor self esteem
- Overall quality of life.

Communication is fundamental to all aspects of life and learning, and without access to a communication system students demonstrate lower rates of initiating communication resulting in fewer adults responding and fewer social contacts.

Providing communication systems and a language learning environment for our students is not only an educational obligation but a student’s right legally and morally.



Before any changes at a student level could be made, the project needed to outline how the cultural shift could be made so that our students could begin to access the new communication opportunities that a language learning environment and formal communication systems could offer. PODD’s (Pragmatically Organised Dynamic Display) Communication books designed by Australian SLP Gayle Porter (Abridged CV attached) had been in use in the Mother/Child group and Pre-Prep group in 2013/14 with good success. Staff was generally accepting that it may work for some students in early intervention but not for the older students who they believed had much more severe disabilities.

The project was outlined with these goals:

1. Increase the knowledge base of staff around complex communication, visual impairment and communication, use of communication systems e.g. PODDs and the teaching-learning strategies for communication.
2. Purchase extra EQSLP time – .2 to help follow up services in the classroom
3. To purchase aide time to help make communication books and to act as communication assistant
4. To purchase consultant time to work in the classroom with the teachers.

1. Professional development

A critical element to cultural change is establishing a shared knowledge base and a common understanding of our goals. The Administration's desire to have a long term communication goal for every student of **“being able to say what I want say to whoever I want to say it to, whenever I want to say it” (Gayle Porter)** depended on staff recognising that:

- students had the ability to communicate
- we could provide the means for them to communicate
- they were integral parts to this process
- but importantly, like the Active Learning process, communication as I was proposing was built on the “opportunity to learn, and so step by step, achieve the foundations that would enable learning at higher and higher levels”-thus staff need not feel as though they were being asked to abandon Active learning.

The funding allowed Gayle Porter to provide professional development over a 2 day period from the 21.1.15-22.1.15. Gayle Porter is an SLP based with CPEC (Cerebral Palsy Education Centre) in Melbourne. She has had 30 years' experience working with individuals who have physical and multiple disabilities across a lifespan. She has internationally acknowledged expertise in augmentative and alternative communication (AAC) strategies for individuals who have complex communication needs (CCN). Gayle Porter is the developer of the PODD communication systems and her abridged curriculum vitae is at the end of this document.

Gayle provided a background of information supported by many videos of students both young and old, all with visual impairment and all with severe physical impairments using partner assisted scanning to communicate successfully with PODDs.

The background to this information briefly was:

- For students with CP (and like disabilities) the movement patterns are different and gestural movement required for communication may not be possible therefore communication development follows an atypical pathway.
- Our staff had felt our students were not ready or capable of having communication systems because our students had little to no vision and severe physical impairments. They also relied on the Functional Assessment Scheme for diagnostic information. It has long been recognized internationally that there are no pre-requisites for the introduction of an AAC system. In 1993, Pat Mirenda said “The only pre-requisite for AAC is breathing”. The candidacy model is outdated and is no longer supported by research. Research now supports the participation model especially that of modelling. Gayle discussed the notion of dynamic assessment using Vygotsky's Zone of Proximal Development (1962,1978)-
What can the child do alone? - Structured guidance (including AAC strategies) - What can the child do in collaboration with a skilled other?
- Students with physical disabilities often have to be taught the movements for communication-they do not learn these by themselves because of the limiting movements from cerebral palsy - movements required for saying yes/no; to initiate communication such as a hand in the air to alert the partner “I have something to say”.
- For communication systems to be successful, the students smart partners need to:
 - Model consistently
 - Establish communication habits
 - Provide communicative opportunities
 - Recognize and respond to communicative attempts
 - Carry the books everywhere
 - ALWAYS EXPECT COMMUNICATION
 - BELIEVE IN THE STUDENT
 - Initial aim is develop receptive language input. Expressive language may take a number of years (remember the period of time it takes a typically developing child to develop speech)

- Gayle spent a large proportion of the second day helping staff practice using the books and modelling partner assisted scanning. Because our students have a visual impairment, most of the students will be auditory scanners so this requires the partner to present the options in a consistent manner. Gayle stressed the difference between Accept/Yes and Reject/No when using the communication books so it is easy for the students to access the vocabulary. She stressed that students did not need to have a definite Accept/Yes and Reject/No to begin using a book nor did a student need to know all the language in the book. Students already know the word they want to say so only need to listen for the particular word they wish to convey and disregard all others. Students need to learn the patterns of language presented in the books and because our brain learns patterns more easily, students can begin to anticipate when the word they want is coming in the book.

The 2 day workshop was thought provoking and stimulating and certainly provided the information staff needed to begin the cultural change. The feedback was positive and there was an air of excitement in the school as staff began talking to each other and to me about students and asking follow up questions.

The principal, Ann Nystrom negotiated with Gayle Porter to return in August to provide 3 days consultation working with the students and to provide follow PD for staff on her observations and to provide guidelines for future goals.

2. Purchase of .2 EQ SLP time

The school had targeted improved autonomous communication for each student and improving staff capability in being effective communication partners.

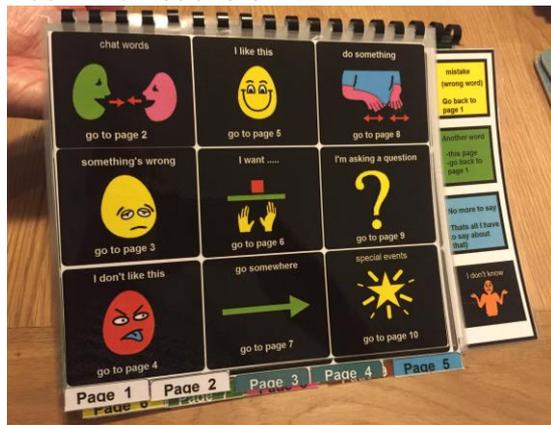
A key strategy for these goals was the purchase of additional SLP time.

The current allocation of SLP time, while it had been increased from 2013, was not sufficient to carry a project of this size. The funding allowed the school to purchase an extra day/week which allowed the time for SLP to be split between Kerrie Mclean-5 days/fortnight and Lidia Culpio-1 day fortnight.

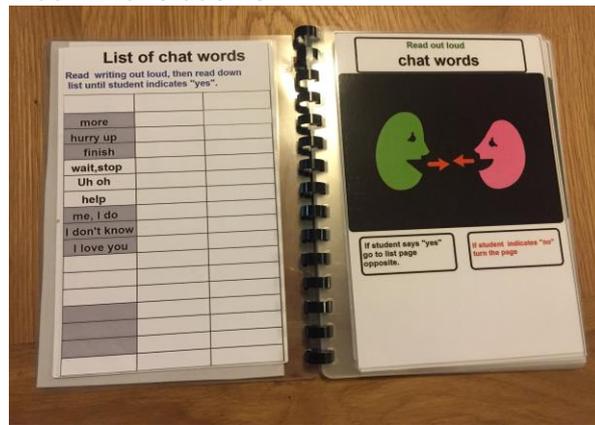
The SLP's worked with school leadership team to develop and implement the professional plan. In addition, the SLP's worked in a coaching role to support the school to:

- Provide additional PD- full day workshop to AVT's-VI's to help them understand the information from Gayle and the new approach to VI and complex communication needs. This PD allowed them to have information on "best practice" to better support their students and in their capacities as AVT's-VI's and the student's families and support teams especially in regional areas. A parent PD- "C.A.N.-Communication at Narbethong" was also held.
- To begin the process of total school communication practices.
Because our students often need to be taught the movements for communication e.g. Chin on chest for "yes" and head from side to side for "no", this became a focus for all classes during 2015. The music teacher was asked to create new songs for singing and to practice the movements. Students were supported to use these movements at all times. Overall, there are more students using a conventional movement for yes/no at the end of 2015 than 2014.
- To provide communication books for classrooms for staff and students-these books were designed and based on Gayle Porter's PODD's for early communicators. The books were designed in 2 formats – Book 1 had 9 symbols per page with pragmatic branch starters and was designed for teacher to model in classrooms. All classrooms were provided with 2-3 copies, depending on the class size and staff numbers, and all books were the same so that staff who moved across the campus would be familiar with the book in all rooms. The first goal was to for staff to learn how to model, how to scan correctly and when to model and to make communication a habit. The second book was 1 symbol per page with scanning options for the students to use. Several copies were placed in all rooms. The vocabulary in these books was specific to the Narbethong student body.

Book 1 for teachers



Book 2 for students



To increase the speed of production of books, the administration team purchased extra program assistant time to cut, laminate and bind the books so that the essential role of the SLP's could be better used in staff support of using the books with the students rather than producing the books.

- Build effective communication partners

Current research indicates that the participation model for AAC has the most positive effect on communication abilities especially modelling. Following international best practice that there is no candidacy model for the introduction of AAC, all students were exposed to the modelling of the books in the classrooms. There were 3 important tasks required to create a language learning environment in our classrooms:

1. Ensuring the communication systems were available at all times- this was the first task asked of staff before they began modelling. They were asked only to make sure the books were always visible, always near the students and if the class left the room, the book always travelled with the students. We needed to establish the concept that these books are the student's "VOICE"
2. Using the communication systems to interact for genuine purposes throughout the day
3. Training the partners to use the systems.

It was an important goal to "engineer" the environment in the classrooms i.e. to help staff understand that communication is constantly occurring, and in any activity communication may be the primary goal; a necessary component to achieve another goal or an enhancing goal (Gayle Porter). The SLP time was spent using the communication systems to "chat"; PD at a class level and a team level; in depth discussion for individual students and individual teachers. Teachers were encouraged to video as many interactions as possible either modelling or interacting with students and upload these videos to a common place on the school computer system for all staff to view. Several staff PD sessions were held to look at the videos to discuss outcomes and observations and staff was encouraged to share positive and negative experiences throughout the school.

Funding was also used to purchase extra program assistant time to act as a communication assistant. A third year SLP student was employed part time and with coaching from the SLP was able to work in classrooms to provide extra modelling sessions for teachers and to work with individual students.

Staff responded positively to the videos and found them a valuable learning tool. As some students began to start communicating using their books, this created a sense of excitement and positivity within the school. The students suddenly showing how they could communicate using auditory scanning to express needs, wants and protest in a more appropriate way were not the younger students but from the upper school. This made a significant impact on the staff and the more success individual students had provided more energy for a cultural shift. Staff are now regularly reporting positive feedback regarding communication and appear excited about changes for their students and feel there is a future for communication. Staff now feel pro-active and feel as though they have new strategies to provide a language learning environment within the classroom.

In late August 2015, Gayle Porter returned to Narbethong to work in the classrooms to observe the students and work with the students. She visited every classroom giving feedback on her

interactions and advising on follow up. She provided PD to the school on her observations. Apart from suggestions for individual students, Gayle noted that:

1. Narbethong had had a shift in culture and practice –she noted the staff had worked very hard since her first visit.
2. She felt we now needed to begin to start learning how each student was initiating communication and begin to map meaning on to movements for those students we felt were not initiating at this stage
3. We needed to begin doing more direct and indirect modelling while interacting with the students
4. Many of the students now needed individual books. This process began in term 4, 2015 by making the templates for new books. The books required by our students are not available commercially. By using the design of books left by Gayle Porter, new books with specific vocabulary for our students were designed. Individual books will now be produced in 2016. There has been liaison with other agencies such as Disability Services and Cerebral Palsy League to produce communication books for 3 individual students.

Over Term 4, 2015, the SLP's worked with staff to observe the movements that students may be using to initiate communication so that mapping meaning onto these movements could become consistent by all staff. These were placed into templates along with the student's photo as well as how the student indicated Accept/Yes and Reject/No. This information was then to be placed in an area of high visibility in the classroom so all entering and working in the room would know what to observe for in each student.

Staff was also encouraged to begin practicing direct and indirect modelling during interactions. However, time constraints did not allow for proper modelling sessions of this by SLP but this work will continue in 2016.

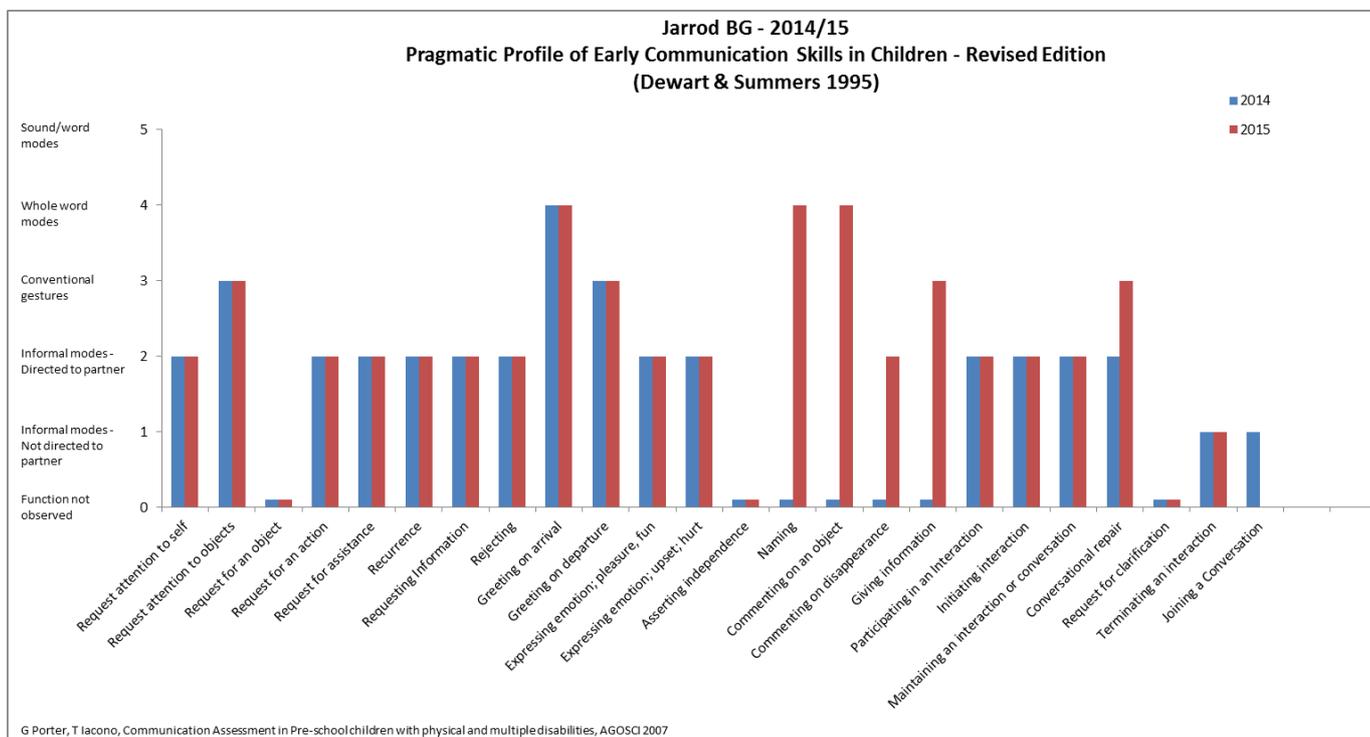
- Collect baseline data on individual students.
Before commencing the project, it was essential to establish some baseline data. However, there was no consistent language assessment across the school except for the Functional Assessment Scheme. In researching assessments that may be suitable for the students at Narbethong, I investigated the possibility of using the Communication Matrix (Rowland, 2004). This assessment is used throughout other special schools with similar populations. However, the manual states "it may not be suitable for students with visual impairment" and the "assessment uses a staged approach based on typical early communication, gestural and spoken communication" (Gayle Porter-response to ACARA-1st draft). Would the students be seriously disadvantaged by assessing them on a language assessment that uses test items involving vision or movements that they could not do? Students with motor challenges and complex communication needs often need acknowledgement that their movements and communication development follows an atypical pathway. These students may acquire symbolic language communication using AAC systems before demonstrating intentional language through gesture. It was decided that the Communication Matrix was inappropriate for this student group.

The students were assessed on the Dewart and Summers Pragmatic Profile of Everyday Communication Skills for Emergent Communicators (1995). This assessment has no age determiners on it. It is based on pragmatic functions i.e. functional language – how and why we use language. It was felt this assessment would give us data on how the students were communicating and what they were communicating. The students were assessed by the teachers in 2014. Each item was given a score from 0-5

- 0- Function not observed
- 1- Informal modes not directed to the partner
- 2- Informal modes directed to the partner
- 3- Conventional gesture
- 4- Whole word mode
- 5- Sound/letter mode

(Scores from Gayle Porter and T. Iancono-"Communication Assessment in Pre-School Children with Physical and multiple Disabilities"- AGOSCI-2007)

These were then entered into an excel spreadsheet for individual students to produce a graph. This format will be continued while the student remains at school so a longitudinal study can be kept. The assessment was repeated in 2015 and a comparative score entered.



At this stage, there is little change in the data and this is not surprising. It must be remembered that our students not only have visual and physical impairments but may have high medical needs. Because of the complexity of needs our students have to deal with, each day presents different learning conditions for them and their ability to maximize their potential varies from day to day. The emphasis in the first year of this project has been on activating a cultural change, a shift in staff practice and to provide an environment where communication is valued and expected.

We also need to consider that staff have only been using these books for 2-3 terms and given that the initial language learning strategy was receptive language using the PODD's, it may take some time for the students to communicate expressively. The significant factor has been that several of the older students in the senior school, after only being exposed to these strategies for a short period of time, have responded extremely well. They are consistently using the books to relay information, to request and comment. Because they use the books to protest and have their needs met, it has meant staff has seen an increased ability to regulate their behavior.

In 2016, there will be more staff PD around this assessment so we can be sure the most accurate information is obtained and the SLP's will devise a "cheat" sheet to help staff. We also know that this assessment is now not suitable for some students so individual assessments will be carried out for those students in 2016. There will be continued liaison with Simon Hill, master teacher for Assessment and Data Collection, so that results of Narbethong SSS assessments on using the Pragmatic Profile can be recorded on One School. Although we can record individual student results, it has been difficult to find a means to capture whole school analysis – this is a project for 2016.

In Term 3, the administration team asked all school staff to complete a "communication" survey on knowledge of and use of PODDs in the classroom. The survey results are attached. Overall the results were positive although not all staff responded, however the survey did reveal some pertinent information:

- Most staff felt their knowledge of PODD's at the beginning of the year was very poor. However, they rated their knowledge by the end of the year as average to excellent.
- Staff rated their confidence in using the books as poor at the beginning of the year but by the end of the year rated it as average to high.
- When asked to rate how often they used the books during the day, the majority of staff responded with 7-Often.
- Staff felt the number of books were sufficient in their classrooms and the type of book was appropriate. Most staff felt the books travelled outside the classrooms with the students and the staff knew the difference between a direct and full model. However, it must be noted that a comment by a specialist teacher was that students regularly came to her classes without books.

- Although teachers and program assistants felt confident using the books, other staff such as OT, PT, Admin etc. did not.
- Overall, staff did not know how their students may be initiating communication.
- Suggestions from the survey included more time with the SLP's, more time to practice modelling, how to develop more language learning and teaching environments, continued use of the videos and peer learning, and the means to reinforce at home.

As we move into 2016, we do so with the knowledge that as a school community we can be proud of the distance we have travelled. Working with students with complex communication needs is challenging and when those students have additional needs it can be overwhelming. However, we need to keep focus on our long term outcome of **“being able to say what I want say to whoever I want to say it to, whenever I want to say it” (Gayle Porter)**.

During 2016, many of our students will receive an individual communication book but unfortunately a book alone does not guarantee success. Research indicates that even if a student has a communication system and uses AAC, they can still:

- be a passive communicator
- initiate few communications
- respond infrequently
- produce limited messages
- have restricted access to vocabulary.

In a study by Johnson et al., (2006) the respondents believed that a complex network of factors accounted for the abandonment or success of an AAC system in all cases and is consistent with other studies. In particular, factors that promoted long term success included:

- Support and use of the AAC system
- Attitude of the family, student, school and communication partners
- System characteristics and fit.

This study highlighted that when a person who uses AAC experienced success with the system and when the user and his/her communication partners highly valued the system, this resulted in success more than 90% of the time. Therefore the communication development is the responsibility of the school, family and SLP, OT and PT and when we work together and share skills, maximise resources, we can increase the effectiveness of our interventions.

The Department of Education and Training (DET) 2014-2018 Strategic Plan is focused on delivering outcomes and lifting performance across services and schools. To strengthen learning outcomes for students with complex communication needs we need to closely monitor the strategies and support provided to enhance communication competence at the school, class, individual and family level. As a school community we need to develop some means to measure our outcomes so that we can evaluate change from one point in time to another. The benefits of this include:

- Evaluate effectiveness and inform decisions about continuing, changing or ceasing strategies
- They can be part of a continuous quality assurance process to monitor and make adjustments in program operations or strategies.
- They can build understanding and commitment to strategies and program goals. We can use the process of evaluation to affect those who participate (e.g. stimulate dialogue, support organisational change, teach evaluation skills and stimulate critical thinking).

With this in mind, our goals for 2016 will be centred around:

1. Working with families to increase their knowledge of communication and about their student's communication system. This will include some more parent mornings, individual sessions and videos.
2. Facilitating communication outside the classroom school events and lunch time play.
3. Using clear and consistent teaching-learning strategies by all staff when communicating with students.
4. Continue teaching movements for communication e.g. Accept/yes; Reject/no; “I have something to say”.
5. Support the wider school community such as Admin staff; OT; PT and new staff so that they can also communicate with students interactively and model using PODD's the PODD's to “chat”.
6. Develop some whole processes i.e. Communication policy and document/ALD “Culture of Communication.
7. Assessment in October/November 2016.
8. Gayle Porter to return to March 2016 for 3 days.

9. Continue direct and indirect modelling.
10. Continue to video students.
11. Continue to link the communication strategies to Active Learning in a meaningful way.

Although we have seen the beginnings of a cultural change during 2015, this change is still in its early stages and we still need to keep working to maintain the change and move forward. We have been excited by the success of several students which the whole school community has celebrated but it does not mean we can be complacent because this communication revolution has just begun at Narbethong SSS.

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