THE BAYFIELD WAY

THE MAKING OF A LEXICON FOR EFFECTIVE RESIDENTIAL TREATMENT FOR HIGH RISK ADOLESCENT MALES

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The Bayfield Way

OUR VISION

Building on our heritage of commitment and dedication, we will set a high standard for providing diversified services that will enable all individuals, in our care, to realize their potential.

OUR MISSION

Bayfield's mission is to provide a range of treatment services to children and youth, who would benefit from an environment that encourages growth, change and positive interaction in the family, community, and within the rights and responsibilities of each individual, by offering quality programs that develop occupational skills, academic skills, life skills, mutual respect, common sense and morality.

OUR TREATMENT PHILOSOPHY

Bayfield's residential treatment service has been designed to manage extreme behaviour in a socially and emotionally supportive, educational and psychologically therapeutic milieu. Our evidence-based program places a strong focus on strength based programming with the child's input and ownership of his behaviour, creating opportunities for success.

The core outcome objective of Bayfield is for our children to form attachments. Attachment is any form of behaviour that results in a person attaining or retaining proximity to some other differentiated and preferred individual, usually seen as stronger or wiser (Bowlby, 1988). Cavell (1988, 1991) adds the construct of the reflective self. It is this additional construct as the basis for attachment that we strive for at Bayfield, knowing that it is the child that allows the caregiver to care.

Our capacity to conceive of our subjective states is a result of actively observing the functioning of other minds, and of experiencing ourselves as subjects of their observations. Thus, a child's sense of psychological self is a direct result of the caregiver's perceptions. The caregivers' capacity to reflect the child's psychological experience provides him with part of the mental equipment to establish his own reflective self (Cavell, 1988).

The three interdependent components of helping at risk children to attach include care, treatment and educational elements. In this framework the at risk child with a history of adversity is helped to develop supportive relationships with adults, to form peer relationships, develop socialization skills, focus on self-worth, engage in appropriate behaviour, practice life skills and manage stressful situations. In this highly supportive environment, the 'at risk' child interacts daily with caregivers who consistently reflect the child's positive psychological self.

Our outcome measures are part of the Bayfield Information System (BIS). A series of instruments are administered at the time of admission and every nine months until the child is discharged. A Sociodemographic Scale (Fulton & Factor, 1999) is used to determine the degree of adversity the child has encountered prior to admission. We also take measurements on the child's level of attachment, socialization, emotional functioning, psychopathology, stress and educational achievement.

Our research and outcomes indicate that children placed at Bayfield are able to attach to caring adult caregivers and show significant improvement in emotional functioning and socialization. It is the child's inner working model that determines how he interprets the past, thinks about his life and subsequently decides how

he shapes his future. Clinical strategies, within the framework of treatment, focus on this self-reflective capacity to improve the child's prospects of capitalizing on his optimal potential (Sanders, 2003).

We have learned that academic achievement is one of the best indicators of successful treatment. Our current research and outcomes of academic achievement show that our children and youth demonstrated significant improvements in mathematics and reading and significantly correlated with improved emotional functioning and socialization. Improvements in mathematics were significantly correlated a lower risk level and with fewer conduct problems. Greater improvements in spelling were shown by children and youth with a higher level of socialization (Sanders & Jamieson, 2005; Sanders & Fulton, 2006; Sanders & Fulton, 2008).

Our Goals, Our Beliefs, Our Principles

Who We Are

We have chosen to specialize in the residential treatment industry, by offering services of exceptional quality. Our objective is to be recognized as the company that provides best practices and contemporary treatment to the children we serve.

We create relationships of enduring value with our children, our staff and agencies that partner in our efforts to make a significant difference. Doing so allows Bayfield to meet the needs of our children and maintain our reputation as an organization designed to go the distance.

What We Believe

Our greatest asset, and the key to our success, is our people. We believe that each of us needs a sense of dignity, pride and satisfaction in what we do. Because providing exceptional service depends on our united efforts, we are most effective when we work together cooperatively, respecting each other's contribution and importance.

How We Behave

We demonstrate our beliefs most meaningfully in the way we treat each other and by the positive example we set for one another. In all our interactions with our children, customers, associates, and colleagues, we seek to deal with others as we would have them deal with us.

How We Succeed

We succeed when every decision is based on a clear understanding and belief in the children we serve, and when we couple this conviction with sound strategic and financial planning. We expect to achieve a fair and reasonable profit to ensure the prosperity of Bayfield, and to offer long term benefits to the children we serve, our employees, our customers, our shareholders, and the next generation. We continue to learn and share our collective knowledge and experience with others through participation and leadership in our industry.

Organizational Principles

Power Sharing – our staff at Bayfield lend their education, experience and talent to serve the children we treat.

Inter-dependency – our organizational design creates a team approach that capitalizes on our collective strengths.

Alignment – we share the same goals and outcomes generating a synergy within Bayfield for our children.

Research Driven – current literature within our industry and continuous research at Bayfield shape the treatment of our children and drive our successive quality improvement programs.

Bayfield Information System (BIS) - is designed to collect the data driven evidence based practise and management systems.

Commitment – the Bayfield culture is dominated by the obligation to go the distance in treating the children we serve.

Common Sense – is our inherent common understanding supported by our experience, history and knowledge.

The Bayfield Information System (BIS)

Clinical Functions and Outcomes:

Case Management:

- all children admitted to Bayfield are tracked;
- all staff have access to the BIS;
- case planning requirements are processed through the software;
- Ministry and accreditation standards are monitored;
- compliance reports are produced; agency management is informed;
- staff are supported and trained to operate service with consistency and high standards of evidence based practice.

Clinical Profiles:

- all children admitted are tested using standardized, reliable and valid instruments;
- background information on our children is collected;
- medical needs, medication and diagnoses are gathered

Outcomes are measured from the child's placement date to discharge:

- outcome data is collected on every child through continual updates to the BIS
- restraints
- serious occurrences

- critical incidents
- changes in medication
- changes in scores on standardized clinical instruments every nine months
- changes in the child's grade level performance using standardized educational testing.

Clinical Status as Measured on Standardized Instruments

- Parental Bonding Instrument (PBI)
- Children's Global Assessment Scale (CGAS)
- Conners' Global Index (CGI)
- Feelings, attitudes and behaviour (FAB –C)
- Symptom Assessment – 45 (SA-45)
- Objective Stressors Checklist (OS)
- Level of Care (LOC)
- Psychiatric Evaluation
- Additional Psychometric Assessment

Educational Achievement as measured by the WIAT

- Reading achievement level: standard score
    i. Reading comprehension
    ii. Reading decoding
    iii. Reading grade level
- Mathematical achievement level: standard score
    iv. Mathematics numerical operations
    v. Mathematics reasoning
    vi. Mathematics grade level
- Oral Language achievement level: standard score
    vii. Oral language: listening comprehension
    viii. Oral expression
    ix. Oral language: grade level

Profile of Clients Served and the Outcomes of Treatment

The *Bayfield Way* is steeped in a history of shared values and principles. In brief, we captured the clinical and educational profile of the children admitted to Bayfield, and study the changes of the outcome research dataset as the child progresses through treatment.

The Dataset

There are 338 children in the Bayfield outcome research dataset. These children have been tested every nine months for the past ten years on a series of standardized, reliable and valid clinical and educational tests.

The group of children in the dataset includes 310 continuous records of every child placed in Bayfield from January 1, 1999 to Sept 4, 2008. There are 28 children who were placed before 1999 that are in the dataset because they were in residence when testing began.

Three children served by Bayfield have been tested continuously on 11 different occasions. 292 children have been tested twice, 218 children have been tested three times; and 152 have been tested four times. The Bayfield outcome research dataset is one the most comprehensive, longitudinal outcome studies conducted on a total population admitted into residential treatment.

Previous Reports on the Outcomes of Treatment at Bayfield

Sanders, L. (2003) "Attachment of Adolescent Males in a Residential Treatment Setting," UMI Publication, Ann Arbor, Michigan.

Sanders, L. & Jamieson, J. (2004), "Predictors of Academic Achievement for at Risk Adolescent Males in a Residential Treatment Centre." The Fielding Institute, Santa Barbara, CA.

Sanders, L. & Fulton, R. (2006), "Educational Achievement and Attachment, Bayfield School Outcome Study", The Fielding Institute, Santa Barbara, CA.

Sanders ,L. & Fulton, R. (2007), "Evidence Based Practice at Bayfield, Making a Difference that Lasts a Lifetime", Symposium at the University of Cape Town, Canadian Psychological Association Ambassador Delegation to South Africa, 2008.

Sanders, L. & Fulton, R. (2008), "Analysis of the Bayfield Treatment Model and Educational Outcomes", Presented at the University of South Africa, Canadian Psychological Association Ambassador Delegation to South Africa, 2008.

Stuart, C. & Sanders L., (2008), The Role of Child and Youth Care Practitioners in Evidence-Based Practice in Group Care, OACAS Journal, Volume 52, Number 4.

The six recent studies reported on the statistical analysis of the outcome data from many perspectives. The documents are accessible in full text at the Bayfield website: **HTTP://WWW.BAYFIELD.NET.** In summary, the first five reports concluded that:

- Lower attachment, as assessed by the overprotection scale of the Parental Bonding Instrument, was associated with higher scores for psychiatric symptoms, poor emotional functioning and poor socialization.

- Between admission and second testing, a statistically significant increase in attachment, socialization, educational achievement and emotional functioning occurred.

- These findings suggest that changes can occur in attachment in a severely at-risk population of males and that this change can occur in as little as nine months

- A path analysis of the multiple waves of data identified the proportion of children who started in the clinical range on each test, the percent who improved and the percent who stayed the same. The factors related to positive outcomes were identified, leading to recommendations for Bayfield staff.

- We conclude that Bayfield is effective in building resilience and alleviating symptoms. Virtually every child admitted to Bayfield has symptoms of emotional disturbance and/or poor attachment feelings towards his closest parent.

- The test scores on admission measuring academic performance, emotional symptoms and functioning, attachment and distress are not correlated with each other with a few exceptions. In general, they are *independent* and *distinct* variables.

- Because of the prevalence of severe environmental distress, the entire population of Bayfield experiences a baseline of problems and symptoms in the educational, clinical, personal distress and attachment domains.

- 23% of children tested on the attachment scale at time one had an average t-score of 35 at time one, meaning that they felt profoundly unloved. Nine months later, these children had a mean score of 47, within the normal range, indicating a unprecedented improvement. The caring effect size for this group of children is statistically very strong, at 1.167.

- These children also produced moderate effect sizes in other clinical scales (CGAS and SA-45).

- This group improved significantly in their standard reading scores (effect size of .324) indicating that they were *catching up to their peers* in reading skills at the rate of 32.4%.

- The children who feel *unloved*, not only get better in terms of this feeling, but their reading is significantly improved to a moderate degree in effect size.

- Approximately one half of children in Bayfield scored above 60 on the overprotection scale of the PBI (attachment), meaning that they believe that they were treated unfairly by their "closest" parent.

- The effect size on the overprotection scale is in the high/moderate range (.678) after nine months of treatment.

- The children who felt *unfairly treated by their parents*, not only improved on this feeling, but their math and oral learning also improved to a moderate degree in effect size.

- The most dysfunctional children are less likely than others to show special problems with attachment; the caring and over controlling scores are very close to 50 for this group. This demonstrates that attachment scores at T1 are independent of the clinical scores. By T2, about nine months after admission, these children have improved significantly on the CGAS reflected in the very strong effect size (-.990). In addition, these children are associated with a moderate effect in oral learning standard scores (.406).

In summary, the test data provides substantial evidence of treatment effectiveness at Bayfield. This includes improvements in symptoms, functioning and academic performance. It appears that improvements in the child's self-reported feelings of being loved and treated fairly predates and conditions the child for greater improvements clinically and educationally.

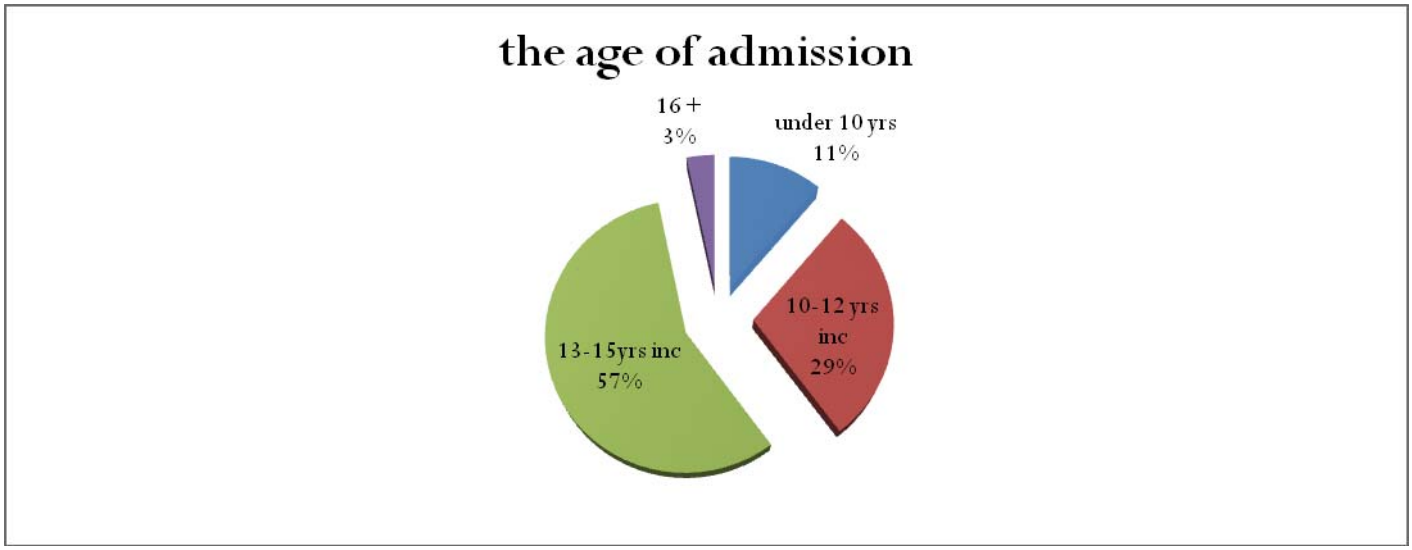
New Insights in the Outcome Research Dataset

The Outcome Research Dataset was re-analyzed in order to further our knowledge about the factors contributing to the remarkable clinical and educational outcomes observed at Bayfield. The new insights were led by a series of hypotheses.

Research Question #1:

Does the age of admission make a difference in the outcomes for children?

The Age of Admission to Bayfield Ranges from 6.9 years to 17.3 Years.



FINDING #1 THE AGE OF ADMISSION MAKES LITTLE DIFFERENCE IN PROFILE AND OUTCOME

- Age of admission is not correlated with clinical test scores on admission, including the amount of adversity. This means that the adversity is loaded at a very young age.

- The SA-45 is higher with age at admission indicating that our children acquire more psychiatric symptoms if the admission date is delayed.
- The PBI Caring Scale is lower for children who are admitted at an older age, indicating they feel a greater need for love if the admission date is delayed.
- Age of admission is highly correlated with initial grade levels.
- Age of admission is not related to the *amount of progress* in the caring or controlling scales: this means that children of all ages have an equal chance to improve their sense of being cared for and treated fairly in life, the inner working model of attachment.

85% of the children who felt *very unloved* on admission improved after the first 9 months of treatment in Bayfield. This result means that children who are admitted to Bayfield with significant attachment issues improve dramatically in the first nine months of treatment, regardless of the child's age at admission.

- This finding was confirmed by limiting the analysis to children whose t-score on the caring scale was below 45 (mean =34) indicating the child felt profoundly unloved on admission.
- Regression analysis between age of admission and all change scores in the Caring Scale (PBI) *found no relationship.*
- The greatest change occurred in the first nine months, when the average t-score changed from 34 to 47; indicating that these children were within the normal range compared to typical children in society.
- Age of admission is related to improvement in math from time 1 to time 4, with younger children showing the most improvement.

Research Question #2:

Are children who were admitted earlier (between June 1995 and Sept 29, 2004) different clinically than the more recent admissions (admitted from Oct 13, 2004 to Sept 4, 2008)?

There are 113 children in the outcomes research dataset who were admitted between Oct 13, 2004 and Sept 4, 2008 (the new cohort). There were 225 children who were admitted between June 30, 1995 and Sept 29, 2004 (the old cohort). An analysis of variance comparing the old and new cohorts was performed on all variables.

FINDING #2 NEWER CASES ARE SIMILAR TO OLD CASES IN PROFILE, BUT RESULTS ARE BETTER IN A FEW AREAS

- The old and new cohorts are not statistically or materially different on most aspects of the profile on admission, including age of admission, most clinical scores, all educational achievement scores and most of the improvement scores. There are few critical differences.
- The old cohort has more types of adversity in their background (4.29 *old* compared to 3.71 *new*; f-ratio = 7.4, sig = .007), as measured by the Sociodemographic Checklist.
- The old cohort had many more complaints and more stressors on admission. (4.18 *old* compared to 2.81 *new*; f-ratio = 12.1; sig = .001)

Although, there is a belief that children in the past were clinically and educationally different compared the current group of children being placed, this belief was not supported, statistically. The exception is that the old cohort had experienced greater adversity and current stress compared to the new cohort.

The new cohort of children showed significantly greater improvement in their sense of feeling loved, social adjustment and independence skills.

- The new cohort is more impaired in the daily living skills and require a higher level of care (20.8% *old* compared to 24.6% *new*; f-ratio = 7.5. sig = .007). The percentages refer to the percent of adult support required for the child to function in daily living activities.
- The new cohort made greater improvement on the Caring Scale of the PBI; this means the new children are developing a deeper sense that they are loved during the first nine months of treatment (\-3.0 *old* compared to +3.1 *new*; f-ratio = 5.2, sig = .02).
- The new cohort made greater improvement in the percentage of adult support required for them to function in daily living skills; the children made continuous progress across 4 waves of testing. By the 4th wave, the new cohort of children had improved by 8.1% which is greater than the difference between old and new on admission.
- The pre-post CGAS scores, which measure how well the child has adapted to the social roles of his life, show greater improvement in the new cohort, even though the two groups were equal on admission (improvement of 3.67 old compare to 9.82 new ; f-ratio = 5.1, sig. = .003).

Our conclusions under Finding #2 suggest that Bayfield has been doing something different over the last four years to improve the results.

Research Question #3:

Do the children that remain in treatment for a longer period do better on clinical tests?

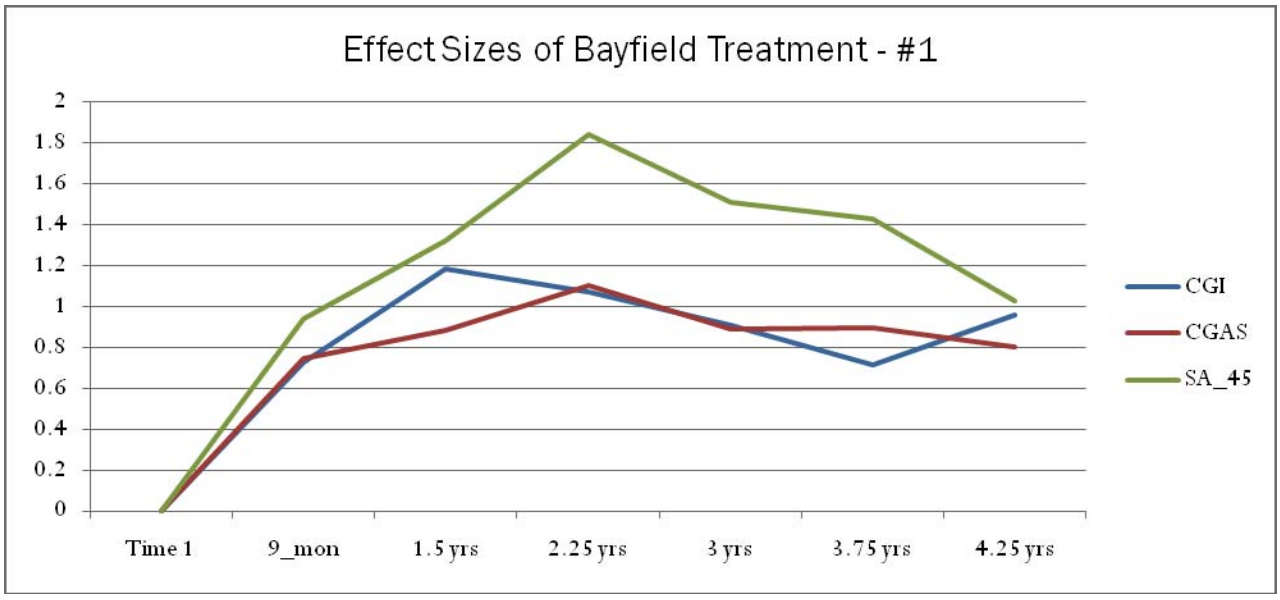
- This is a fundamental question in the field of residential care. It is difficult to evaluate within Bayfield because children move from the intensive residential setting to next step settings; therefore, the children are receiving different levels of treatment intensity and degrees of structure across the Bayfield Treatment Continuum.
- *This fact suggests another question: does the treatment process, including the words and activities provided to the child, change as the intensity of treatment decreases.*
- The research question, *do children that remain in treatment for a longer period do better on clinical tests*, was examined by comparing the amount of change in the clinical and educational measures for each wave of outcome testing at the following intervals:

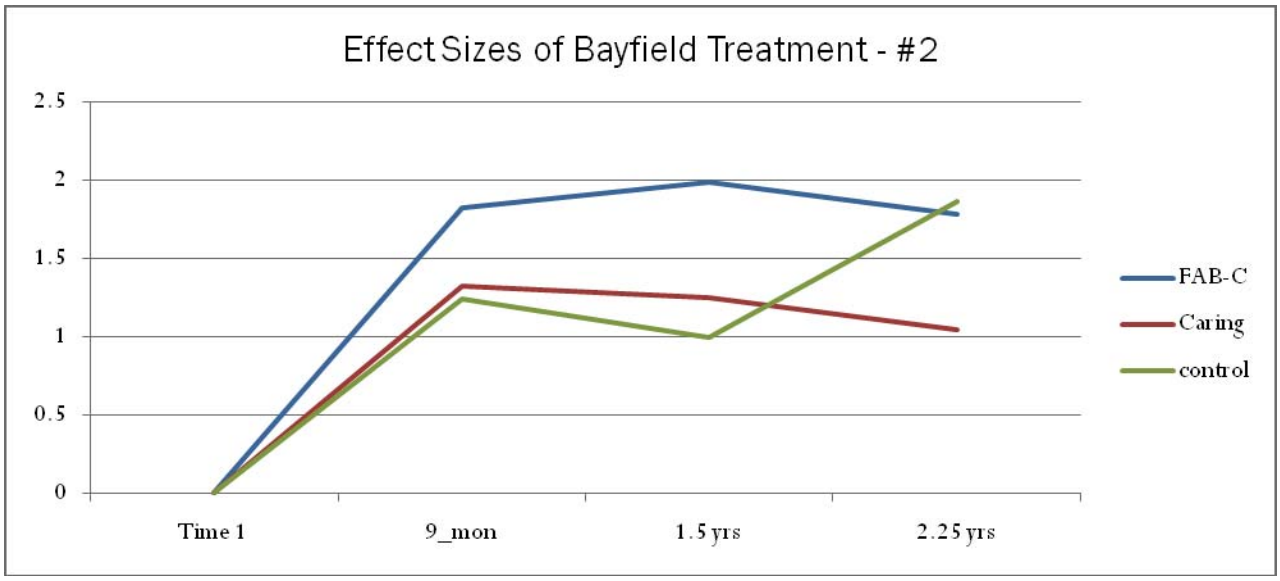
  - 1st wave: within 30 days of admission
  - 2nd wave: ending nine months after admission
  - 3rd wave: ending 1.5 years after admission
  - 4th wave: ending 2.25 years after admission
  - 5th wave: ending 3.0 years after admission
  - 6th wave: ending 3.75 years after admission
  - 7th wave: ending 4.5 years after admission

- The effect size of treatment is a standardized unit for measuring the amount of change between two scores. The formula for measuring treatment effect (Cohen's D) is [*mean 2 (3, 4, 5, 6, 7) – mean 1)/standard deviation of mean 1*]. Graph #1 displays the average effect sizes for the CGI, CGAS and SA-45 across 4.5 years of treatment. The "n" or the number of children at each wave becomes increasingly smaller. The smallest number of cases at the 7th wave is 10. However, Cohen's D displays very little "small sample bias" with samples between 10 and 25 (Lipsey & Wilson, 1993, page 1195).
- The outcome dataset was filtered for each test, so that only scores in the clinical range at T1 are included in the computation for that test. This is necessary because there is no opportunity for a treatment effect in children who do not have the symptom in the first place. For example, 37% of 126 children had a t-score on admission as tested by the Conners' Global Index that was greater than 70 (the clinical threshold). Only 12 of these cases were in Bayfield's care long enough to be tested at the 7th wave. The CGAS effect sizes start with 273 cases in the clinical range on admission and the SA-45 effect sizes start with 46 cases on admission.
- The graph of the Bayfield treatment effect shows the standardized improvement starting from zero on admission to the 2nd test at 9 months and so on. An effect size of 1 means an improvement of one standard deviation compared to the score on admission.

- Graph #1 shows the treatment effects over time demonstrates that our children achieve dramatic improvement in test scores during the 1st nine months and this continues through to the 4th wave, 2.25 years after admission. At this point, the test scores begin to fall back, although they never fall lower than 80% better than at admission in the case of the CGAS.
- Graph #2 displays the treatment effects for the Parental Bonding Instrument (caring and fairness scales) and the FAB-C. The Caring Scale starts with 33 cases who felt very unloved at T1; the control scale starts with 28 cases who felt they were over-controlled and treated very unfairly. The FAB-C starts with 29 cases at 9 months.

FINDING #3: BAYFIELD SHOWS VERY STRONG TREATMENT EFFECTS USING STANDARD CRITERIA





- Graph #2 shows a dramatic improvement in the FAB-C, Caring and Controlling Scales in the 1st nine months; the Controlling Scale falls back slightly at the 3rd wave and makes another dramatic improvement to the 4th wave. There were not enough cases tested at waves 5, 6 and 7. The average effect size for all clinical instruments across all time periods is 1.2, which is very strong using Cohen's standard criteria (Lipsey & Wilson, 1993).

Treatment Process

The Bayfield outcomes research dataset contains ample evidence that:

- when children were admitted to Bayfield, they were at very high risk of serious psychiatric and behavioural adverse outcomes;
- within the first nine months, a strong treatment effect occurs, resulting in symptom reduction, improved social functioning and better attachment;
- the treatment effect continues to grow stronger for a period lasting 2.5 years from admission and then the effect levels off because most children at this point appear to be symptom free;
- the gold standard for proving that a high risk teenager has been successfully treated is that he no longer exhibits behaviour that is dangerous to others or himself; the BIS tracks the progress and provides evidence that the number of aggressive incidents, the need for restraint and the number of serious occurrences decrease to zero as the clinical indicators improve.

Bayfield Treatment Context

The Bayfield treatment context includes:

- a clinical department staffed by a clinical director, 2 psychiatrists, 2 psychological associates, 9 clinicians with MSW and MA qualifications, and a medical coordinator
- a private school with 10 board certified, professional teachers, with 4 program managers
- next step programs (14 parent therapists)
- community based treatment homes located in small towns
- a central campus with 4 treatment homes

Bayfield's front line includes 13 clinicians, 14 parent therapists, 10 teachers and 133 child and youth therapists. Bayfield has a total staff compliment of 210 staff and is able to provide all of its residents with:

- intensive remedial education in a small private school
- diagnostic assessment
- psychiatric and psychopharmacological management of DSM disorders including early onset bipolar disorder, major depressive disorder and major anxiety disorders
- psychotherapy with clinicians who deal with trauma issues, family pathology, sexual identity, dysfunctional thoughts and attitudes, adversity and deprivation
- therapeutic residential care with a continuum of treatment, including a highly structured residential treatment homes and next step programs.

The Therapeutic Experience

Knowledge of the Bayfield structure does not answer the most basic questions:

- what does the child experience as he lives within the Bayfield community, attends school and receives counselling
- what is the language of the therapeutic culture
- what are the child's experiences within the therapeutic culture, and
- what do these words and experience mean to him.

We have a solid body of evidence to believe the residents who experience The Bayfield Way improve significantly, but the outcome evaluation leads us to pose other research questions:

1. *The information under finding #2 suggests that Bayfield staff have been doing something different over the last four years to improve the results; what is different?*

2. *Does the treatment process, including the language and activities experienced by our children change as the intensity of treatment decreases; do our children hear different messages and have complementary therapeutic experiences across the Bayfield Therapeutic Continuum?*

3. *What language and experiences do our staff use as they interact with our children and what is the meaning of the words and deeds that our staff are conveying?*

In a quest to answer these questions, Bayfield set out to discover the praxis of its therapeutic framework and to disseminate the knowledge to our staff and our stakeholders. We are attempting to articulate The Bayfield Way through the use of a lexicon .

Functions of the Bayfield Lexicon

The Bayfield Lexicon described below is a work in progress. However, as the discovery process unfolds, the Bayfield Lexicon plays a critical role in quality assurance:

- The lexicon helps new staff to learn what they must say and do in order to produce the best outcomes for children, including applications such as providing scripts for staff to use when in dialogue with our children.
- A method of monitoring compliance with the lexicon, Bayfield is able to support staff through training and supervision to maintain a high quality and consistent therapeutic experience for our children.
- As new evidence emerges in the research literature about what we need to say to children to help them overcome the consequences trauma, neglect and mental illness, the lexicon can evolve to disseminate new knowledge.

These functions mean that the Bayfield Lexicon is evidence based practice in action using the criteria established by Burns and Hoagwood (2002) and Chambliss et al (1996).

Development of the Bayfield Lexicon

The Bayfield Lexicon was developed by means of an expert panel representing the entire organization. Four focus groups were conducted with clinicians, child care therapists, teachers and next step parent therapists. The groups were asked to describe the language used when treating our children/or activities that contribute to positive outcomes for our children.

The actual words used by our staff to describe their "therapeutic interaction" with our children was transcribed independently by three observers of the focus group process. These words were assembled into a lexicon. The words were transcribed into a survey question. The first two rows of the survey are copied below:

How often do you interact with the children using a similar approach to the examples below?	Frequently (every day)	Often (2-3 times per week	Occasionally (once/week)	Rarely or never
We instil confidence to help our children succeed in the community				

The Bayfield Lexicon was transcribed into 56 questions and administered to our staff. The response rate was 78%: clinicians (62%), teachers (100%), parent therapists (39%), child care therapists (84%).

The survey provided data on the number of times our staff use the words and actions of the Bayfield Lexicon in their interactions with our children. The data allows one to see if there are differences in the content of our staff interactions with our children across the Bayfield continuum of treatment. It also provides a capacity to assess the level of implementation for different interventions. The content of the Bayfield Lexicon represents our therapeutic intentions and our beliefs about the needs of our children.

The survey questions were mapped thematically to the literature on the theory of inner working models. The questions were coded by the following thematic categories:

AS_ = attitudes about self

GR_ = grounded in reality

RO_ = relationships with others

SR_ = self reflection

ST_ = structure

EI_ = emotional interaction

Theoretical Foundation of the Bayfield Way

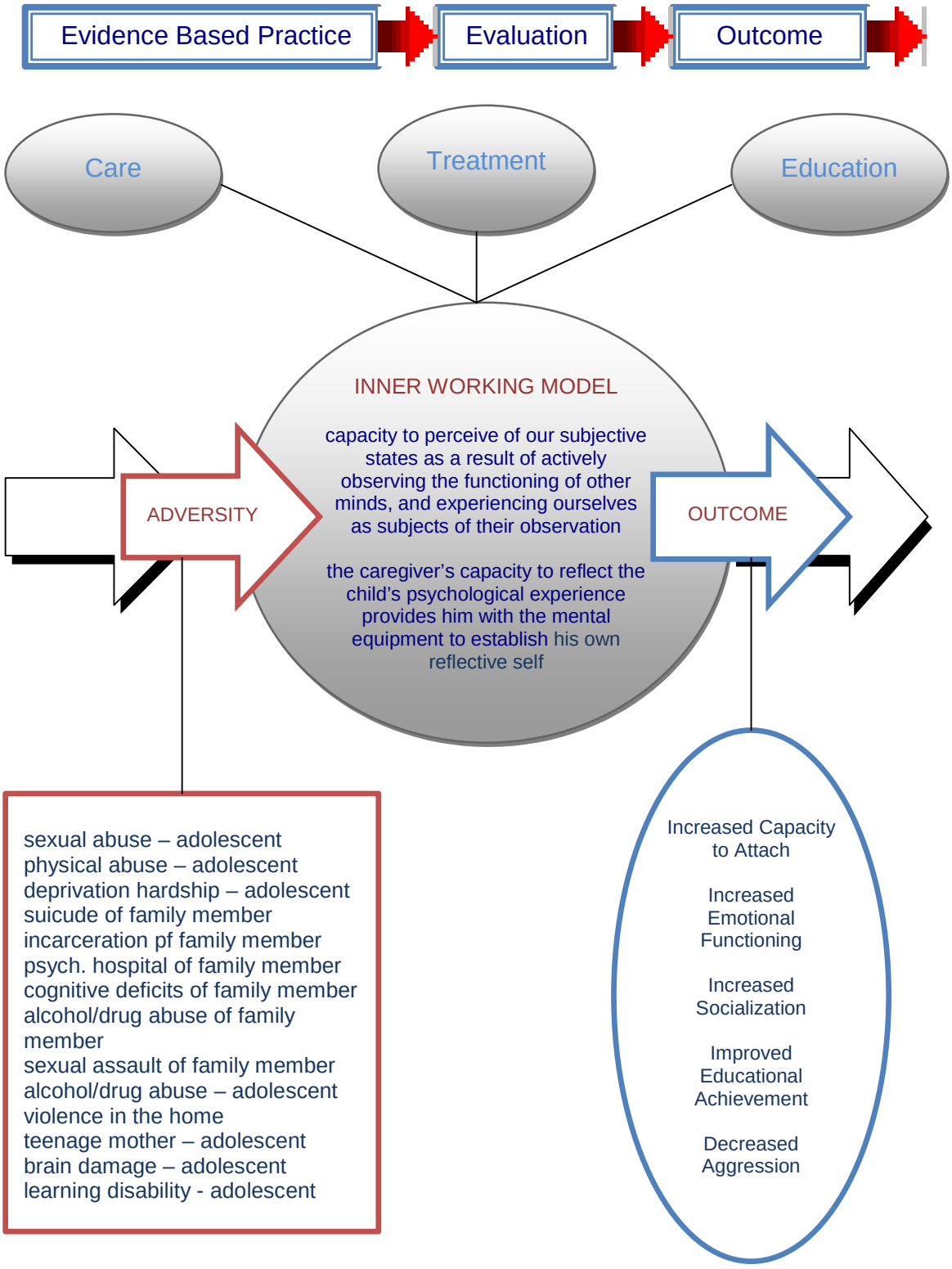
The front line and management staff of Bayfield have worked together for years around a theoretical model of child development, inspired by the writings of Fonagy, Crittenden, Ainsworth, Bowlby and others. Early attachment theorists suggested that the child creates a mental representation of the parent at a very young age. This mental image allows the child to be comforted at times when the actual parent is not physically present. The mental representation develops more fully as an inner working model for storing and re-playing behaviours that he has learned will alleviate fear and discomfort. These behaviours include external actions (such as crying, smiling, looking into the face of mother and vocalizing) as well as internal behaviour such as organizing sensory data, holding a mental image of mother, recognizing her on reunion and so on. Researchers have found that children who are maltreated will develop dysfunctional inner working models resulting in poor affect regulation, perceptual bias, self defeating thoughts and defective interpersonal behaviour. In other words, the internal processes which drive serious maladaptive behaviour.

The majority of special needs children (Groze, 1996; Goldberg, 2000; Crittenden, 2000) can form secure attachments, but they often retain dysfunctional aspects of their inner working model. Crittenden (2000) also points out that no matter what happens, the attachment relationship and the inner working model change continuously over time with each maturational stage and with significant disruption and periods of stress. This insight provides the opportunity for treatment that is at the core of The Bayfield Way, as illustrated on page 16.

The evidence based approach has been measured using the psychometric and sociometric instruments described earlier in this paper allowing us to produce outcomes through the Bayfield Information System (BIS). The three major interdependent components, residential (care), treatment (clinical) and education (school) are aligned through the BIS. Adversity is measured by the Sociodemogaphic Checklist (Fulton and Factor, 1999) at the time of admission. Data analysis has continued to show that our children have the capacity to attach, have demonstrated an increase in emotional functioning, have become more socialized, and have made significant gains in their academic achievement. It is also noted that our children have become less aggressive over the course of treatment (page 17).

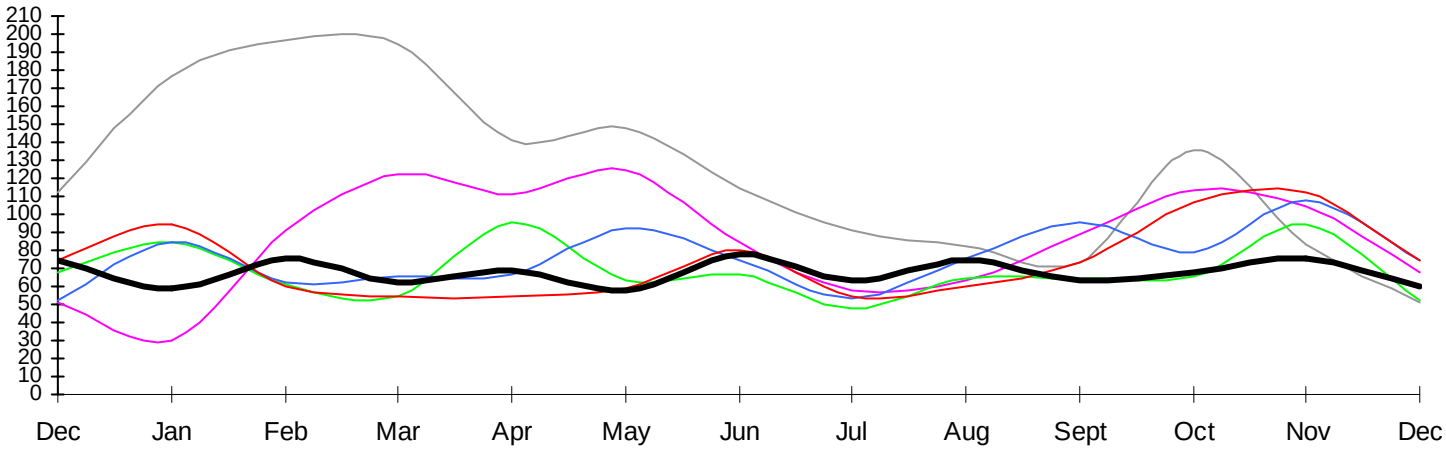
BAYFIELD THEORETICAL FRAMEWORK

Inner Working Model



L.S. Sanders, 2003

Bayfield Restraint Patterns



2003
Total: 1488
Average: 124/month

2004
Total: 1058
Average: 88/month

2005
Total: 820
Average: 68/month

2006
Total: 934
Average: 78/month

2007
Total: 884
Average: 74/month

2008
Total: 807
Average: 67/month
9% less than 2007

Data indicates 46% fewer restraints in 2008 than 2003

T. Powell, Director of Residential Services, Bayfield Treatment Centres

The Bayfield Lexicon

Therapeutic language to connect with our children

The Bayfield Lexicon is a work in progress. The children and youth served by Bayfield have made significant progress since being admitted. The Bayfield outcomes research dataset contains ample evidence:

- When our children were admitted to Bayfield, they displayed serious psychiatric and behavioural problems; they were on track for dropping out of school and many were five years behind their peers academically.

- Within the first nine months, a strong treatment and academic effect occurs, resulting in significant advances in reading ability, symptom reduction, improved social functioning, better attachment, and a significant decrease in aggression. For example, in the first nine months our children were *catching up to their peers* in reading skills at the rate of 32.4%.

- The treatment effect continues to grow stronger for a period lasting 2.5 years from admission to a point when most children are symptom free. They continue to make gains in reading and oral learning. By the end of the 2.5 year period, the last academic barrier falls and the children start to acquire math skills at an accelerating rate.

- The gold standard for proving that a high risk teenager has been successfully treated is that he no longer exhibits behaviour that is dangerous to others or himself; the BIS tracks and provides evidence that the number of aggressive incidents, the need for restraint and the number of serious occurrences decrease to zero as the clinical indicators improve.

These results mean that the child and youth treatment staff, treatment parents, teachers and clinicians of Bayfield are working as a team and delivering programs that work. The CEO assembled an expert panel representing the entire Bayfield organization. Four focus groups were conducted with clinicians, child care therapists, teachers and parent therapists. The groups were asked to describe what they said to children/or did for them to contribute to positive outcomes for our children.

The actual words used by our staff to describe their "therapeutic interaction" with our children were transcribed independently by three observers to the process. The content of the *Bayfield Way* for treating and educating children was transformed into a questionnaire and sent to all staff, asking if the techniques apply to them. The survey was completed with a 78% response and validated by statistical methods. The Bayfield Way is being implemented across the organization.

We used the survey and statistical analysis to create the Bayfield Lexicon; the verbal and non-verbal communication between children, caregivers, clinicians and teachers.

The Bayfield Lexicon is organized according to the major functions of treatment and education, the text and activities listed below are "intentional language" and associated activities that our staff uses frequently to create a positive therapeutic experience for our children. This is the Bayfield Way.

Normalizing

- "Treat children as if they are not broken"
- "Create normal interaction through play"
- "Look at school positively; just attending school every day is success"
- "See the world through the child's eyes"
- "Ensure success; instil confidence to help our children succeed in the community"
- "Celebrate the child's successes"

Positive Self Regard

- "Build experiences and make happy memories for the children while they are part of the Bayfield community." Some actions are:

    - Take pictures
    - Develop a life book with timelines
    - Cookie Day
    - Reading groups
    - Camping
    - Model club
    - Yoga
    - Music lessons
    - Hockey
    - Baseball
    - Soccer
    - School awards

    - "Catch the child doing his best"
    - "Use different strategies to increase self esteem"
    - "Set new goals with the child weekly"
    - "Show total acceptance of the child"
    - "Reflect back to the child a positive image of himself"
    - "Reflect on past success"

Environmental Problem Solving

- "Common sense coaching"
- "We care about you"

- "Help them to organize"
- "We are taking care of you and meeting your needs"
- "Flexibility with support and creativity "
- "Different strategies for different kids"

Social Problem Solving

- "Show respect for their parents and set clear boundaries"
- "Facilitate relationships with other children in the house or the community"
- "Sexual relationship program – sex education, life skills, boundaries"
- "Child want to be 'normal' – not identified with CAS"
- "Help the child learn to accept current family limitations"

Caring and Commitment

- "Be there when the child needs you"
- "Give the child a new sense of belonging"
- "Be patient; it may take one year to earn the child's trust"
- "Show a light hearted attitude"
- "Play with the children"
- "Continue to nurture regardless of situation"
- "Bayfield will always take you back – we go the distance"
- "Be interested in the child's interests"
- "Give them a voice"
- "Spend individual time with each child"
- "We believe in the children"
- "We are committed to your potential"

Consistency of Relationship

- "Unconditional acceptance"
- "Provide consistent staff"
- "Promote the connection"
- "Be proactive about relationship building"
- "Fill unmet needs with perseverance by ensuring…"
    - Safety
    - Routine
    - Predictability
    - Stabilization
- "Emphasize the child's effort"
- "Ensure continuity of the treatment plan"

Modelling an Open Trusting Relationship

- "Start every day with a clean slate – deal with the presenting issue and move on"
- "Forgiveness - don't hold grudges"
- "Show that there is rapport with teacher, clinician, CCT"
- "All staff sharing the same vision for the child"
- "Mutual respect"
- "Share your own life experiences"
- "Self disclosure about own family"
- "Be a positive role model"
- "Prompting and praising"
    - Encouragement
    - Authentic praise

Self Reflection

- "Actively listen and reflect what you've heard back to the child"
- "Caring, feeling loved, honesty, an honest message"
- "Reciprocal attachment"
- "See the world thru the child's eyes"
- "Self perception changes from failure to success"
- "Engage the children and help them reflect on situations regarding negative peer interactions"
- "Reshape perceptions of early sexual experiences"

Consistent Structure

- "Hold the child responsible for his behaviour"
- "Clear expectations within the child's ability to succeed"
- "Build the child's confidence while working through a difficult time"
- "Ensure safety through predictable structure"
- "Create opportunity for the child to participate and succeed"
    - Teach the child how to win and lose – child is the winner"
    - Be directive when teaching kids how to succeed"
- "Staff demonstrate support for each other"
- "Staff openly give each other advice"

Engineering the Environment

- "Balance of structure and care"
    - Humour
    - Supervised exposure to media; screen out inappropriate TV"
    - Stable and predictable environment"
- "Creating normal living experiences"
- "Bayfield has checks and balance "
- "Professional teachers, clinicians and CCTs using evidence based methods"

Affectionate Interaction

- "Nurturing to create a strong emotional bond"
    - Physical contact
        - younger children needs hugs
        - engage older children with sports
- "Teach children about feelings"
    - Model self reflective skills
    - Model self awareness
- "Empathize with the child, especially when he is in pain and when he is acting in a self destructive way"
- "It is O.K. to make mistakes"

Authentic Interaction

- "Staff are always glad to see the child and allow him to feel important"
- "Respond to kids in a low key, consistent approach"
- "Demonstrate that we are not afraid of their feelings"
- "Maintain emotional objectivity, Every day is a new day"
- "Be proud of our children when they succeed"
    - feel good when they succeed
    - Teachers have professional pride in the child's achievements

Emotionally Responsive Interaction

- "We like to laugh and help the child to see the humour in life"
- "We are proud of our children and we show our feelings when they achieve something",
- "Children feel successful when they know they fit, when they belong"

Staff Interdependency

- "Support and consultation across the Bayfield system"
- "All staff work from the same treatment plan, plan of care and educational plan"
- "All staff know their role in achieving the child's goals"
- "Cohesive team strategy focused on positive outcomes for each child"
- "Shared documentation is recorded, disseminated and accessed through the Bayfield Intranet (BIS)"

Commentary

The Bayfield culture has evolved on a history of commitment to our children and a common sense approach since 1973. We started collecting data on our children in 1992 through our clinical and management knowledge, current industry literature and through the advancement of computer technology. In 2003 we had compiled five years of data on our children to systematically test our treatment interventions. This strategy allowed us to develop a theoretical framework and we concluded that the most significant impact we could make in our children's lives was to create a therapeutic continuum built on attachment theory. The tools we employed to measure our children's progress clearly indicated our children were making significant gains. The outcomes empirically showed that our children did have the capacity to attach, their emotional functioning improved, they became more socialized, they learned to learn and their aggression decreased markedly.

Central to our continuum of treatment, care and education was Peter Fonagy's (1999) concept of an inner working model. Carvell (1988) further indicated that, "the caregiver's capacity to reflect the child's psychological experience provides him with the mental equipment to establish his own reflective self." To find the way through his emotional maze of adversity children first need to find safety in a place where his behaviour is understood and accepted. Our data indicates that most of our children attach within the first nine months of placement and within 2.5 years most of their presenting symptoms have been successfully treated.

In our quest to understand these remarkable outcomes we capitalized on our organizational intelligence and created the Bayfield Lexicon to hold the language and activities that our dedicated staff consistently implement. Through focus groups and subsequently a survey, we have articulated the language currently used by our staff to build the praxis bridge from theory to practice. We will continue shape The Bayfield Way as our children teach us new language and what they want us to know.

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