The purpose of this paper is to describe a comprehensive psychological services model and outcome data supporting it. Due to their training in behavioral and affective interventions, counseling and consultation, learning theory, systems organization and intervention, program evaluation, and assessment, psychologists who practice in the schools have the skills to provide a large number of services to children, families, and teachers; however, activities relating to the assessment and placement of children with disabilities continues to dominate the practices of school psychologists. An alternative delivery system of psychological services in schools that capitalizes on all of the skills of professional school psychologists was initiated placing a psychologist in each building full time. Outcome data supporting comprehensive psychological services in schools were analyzed. Achievement from a standards-based assessment model showed increases in reading, writing, and mathematics over a period paralleling the implementation of the model. Placements of children identified as having emotional disabilities decreased by 17% over a 4-year period. A problem-solving model of discipline indicated a 77% decrease in referrals. Implementation of the models and explication of the methods are discussed.

(Author/EMK)
Continuing Validation of Comprehensive Psychological Services in Schools

R. Brett Nelson, Ph.D., Greeley Public Schools
Mary Young, M.A., Greeley Public Schools
Ann Obrzut, Ph.D., Greeley Public Schools

Outcome data supporting comprehensive psychological services in schools were analysed. Achievement from a standards based assessment model showed increases in reading, writing and mathematics over a period paralleling the implementation of the model. Placements of children identified as having emotional disabilities decreased by 17% over a four-year period. A problem-solving model of discipline indicated a 77% decrease in referrals. The model's implementation and explication of the methods will be discussed.
Continuing Validation of Comprehensive Psychological Services in Schools

The School Psychology division of the American Psychological Association supports school-based psychologists who conduct comprehensive psychological services for children, families and schools. There is general agreement in the literature that psychologists in schools should pursue alternative delivery models rather than the current assessment and placement practices predominated by most school psychologists (Bagnato, 1996; Brown, 1994; Cobb & Dawson, 1989; Curtis, Zins & Graden, 1987; Paavola, Cobb, Illback, Joseph, Torreulla & Talley, 1995; Doll, 1996; Reschly & Tilly, 1993; Rosenfield, 1989; Sandoval, 1996). In fact, it has been put forth that psychologists and psychological services in schools are in grave danger unless they demonstrate their value to all of public education in the community (Bagnato, 1996). Our constituents want psychologists who practice in schools to provide different services, with more of an emphasis on intervention (Phillips, Riccio, Winsler, Harrison, Iran-Nejad, Cound & Carter, 1996). The purpose of this paper is to describe a comprehensive psychological services model and outcome data supporting it.

Some data exists that supports alternative delivery systems, though the programs are not consistent with comprehensive psychological services as defined by this model. Henning-Stout, Lucas and McCary (1993) implemented a program using multidisciplinary team consultation at a prereferral setting and direct academic intervention in the classroom, resulting in a decrease in special education placements and an increase in teacher requests for defined services over a 5-year period. Other
alternative programs have been described in the literature (Brinkman, 1997; Elias, 1997; Laidlig, 1997) but without comprehensive outcome data.

Due to their training in behavioral and affective interventions, counseling and consultation, learning theory, systems organization and intervention, program evaluation and assessment, psychologists who practice in the schools have the skills to provide a large number of services to children, families and teachers. However, activities relating to the assessment and placement of children with disabilities continues to dominate the practices of psychologists who operate in schools (Bischoff, Wilczynski, Emeis & Combs, 1994; Dean, 1980; Meacham & Peckham, 1978; Sattler, 1988; and Stinnett, 1993).

An alternative delivery system of psychological services in schools that capitalizes on all of the skills of professional school psychologists was initiated in the Greeley, Colorado, Public Schools in 1991. Originally entitled “School-Community Facilitator” at the request of the superintendent, and now simply defined as school psychologist, the position was intended to provide comprehensive psychological or mental health services to all elementary schools in the district by placing a psychologist full time in each building.

Comprehensive psychological services are defined by practitioners spending a majority of their time on activities other than the assessment and placement of children in special education programs. When comparing psychologists in the comprehensive service model related to time on task surveys with a national sample (Stinnett, 1993), 15% of psychologists time was spent on assessment vs. 51% of the time by the national sample. Comprehensive services may include, but are not limited to: individual and group counseling; behavioral and academic assessment and intervention; systemic intervention; affective education or developmental counseling; crisis intervention; research and program evaluation; consultation; family counseling and parent training. Obviously, being in one school full-time helps allow psychologists
to perform all these duties. Also, the needs of individual schools may impact the role of the comprehensive service provider, as they should (Cummings, 1996).

A survey was conducted with district personnel prior to the implementation of the position, and again one-year and two-years later for replication purposes. The survey mean increased from 118.02 to 166.11 after one year \( f(1,283) = 66.58 \) and to 177.30 the second year \( f(2,442) = 42.05 \) with both differences being significant at the .0001 level. The results suggested that school district personnel perceived the psychologists operating in the new model as better able to implement a variety of services than those previously serving in itinerant roles.

As surveys are perceptual in nature, it is necessary to fully establish the validity of the model through the use of outcome data as well. The school district decided two years later to implement the model at the secondary level as well. This provided for the creation of eight new psychologists positions. Done in conjunction with the University of Northern Colorado, it also opened the door for the creation of an internship program.

Placement rates of students qualified as having a Significant Identifiable Emotional Disability were analysed, with the hypothesis that placement rates would be reduced over time with an intervention focus, a psychologist at each school and prerereferral consultation. Numbers placed at the elementary level decreased from 240 in 1990, before implementation of the model, to 199 in 1994, representing a 17% drop (240, 227, 237, 226, 199 - placement changes over a 4-year period). This should be contrasted to a 15% enrollment increase over the same time period, indicating a 32% differential.

A separate study was conducted to look at the relationship between psychological report recommendations and IEP objectives, with the hypothesis being that a greater degree of overlap would occur in a system with a comprehensive service delivery model as opposed to a traditional assessment and placement model.
A district with a similar demographic make-up was used as a basis of comparison. Past research (D'Amato & Dean, 1987) suggests that at the most, only 30% of psychological report recommendations end up as IEP objectives. Interrater agreement regarding the questions asked to determine overlap was .89. As hypothesized, the comprehensive service delivery model exceeded a comparable school district in terms of report recommendation-IEP overlap. An average of 46% of the recommendations found in the Greeley system were incorporated into IEPs as compared to 30% in the other district. Also, the comprehensive service model had more recommendations per report, their recommendations were more clearly stated, included more evaluation components in the recommendations, and found the information to be more directly related to assessment results.

Parallel achievement gains in terms of writing assessments were noted between 1990 and 1995. The percentage of students who passed the writing assessment, after the district switched to a standards based approach, went from 50% to 82% after two-years, 77% after three-years, 95% after four-years and 97% after five-years. The trend in writing continues. Reading standards also increased, but to a lesser degree from 89% to 93% over a similar period. Math standards also increased from 68% to 86% on the Michigan Educational Assessment Program. It is impossible to determine how much of the gains are attributable to the model, considering the number of intervening variables. Nevertheless, they did occur.

Finally, a discipline model was implemented in one school that emphasized a problem solving model as opposed to the typical authoritarian (send them to the principal) model, facilitated by a full-time psychologist. All adults were empowered with consistent tools for dealing with discipline. Specific steps were listed for serious infractions with the power to implement consequences given to everyone. Teachers were required to keep records of serious infractions. The number of infractions decreased from 682 to 196 over a four-year period.
The various validity studies, both perceptual and outcome in nature, support the use of a school psychologist in an interventionist role delivering comprehensive psychological services. To date, the models most closely approximating comprehensive services are described by Pfeiffer and Reddy (1998), conceptualized as school-based mental health programs. However, of the four models described, only one includes outcome data relating to one specific behavioral area. The models described are also not comprehensive in nature, as the school psychologist is limited to either consultant or mental health therapist. If psychologists who work in schools are to have a viable future, they must become indispensable (Talley, Kubiszyn, Brassard & Short, 1996). Only by meeting the needs of their prospective schools and the communities connected to those schools in a variety of ways can they do so.
TABLE 1

Group Differences

<table>
<thead>
<tr>
<th>Group</th>
<th>Baseline</th>
<th>Year 2</th>
<th>F</th>
<th>p</th>
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</thead>
<tbody>
<tr>
<td>Regular Education Teacher</td>
<td>120.4</td>
<td>168.61</td>
<td>(1,130) = 21.35, p&lt;.0001</td>
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<tr>
<td>Special Education Teacher</td>
<td>108.1</td>
<td>198.77</td>
<td>(1,46) = 63.42, p&lt;.0001</td>
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<tr>
<td>Support Staff</td>
<td>123.5</td>
<td>200.20</td>
<td>(1,46) = 13.20, p&lt;.001</td>
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</tr>
<tr>
<td>Principals</td>
<td>119.7</td>
<td>187.40</td>
<td>(1,32) = 18.53, p&lt;.0001</td>
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<tr>
<td>SCHOOL</td>
<td>BASELINE</td>
<td>TEST 2</td>
<td>F</td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>----------</td>
<td>--------</td>
<td>---------</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>86.43</td>
<td>185.28</td>
<td>(1,12) = 19.26, P&lt;.001</td>
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<tr>
<td>2</td>
<td>124.18</td>
<td>180.61</td>
<td>(1,27) = 12.76, P&lt;.001</td>
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<tr>
<td>3</td>
<td>131.86</td>
<td>100.08</td>
<td>(1,17) = 1.98, p&lt;.178</td>
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<tr>
<td>4</td>
<td>99.16</td>
<td>168.71</td>
<td>(1,11) = 6.04, P&lt;.05</td>
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<tr>
<td>5</td>
<td>136.83</td>
<td>229.57</td>
<td>(1,24) = 25.17, P&lt;.0001</td>
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<tr>
<td>6</td>
<td>108.83</td>
<td>216.06</td>
<td>(1,20) = 58.26, P&lt;.0001</td>
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<tr>
<td>7</td>
<td>128.92</td>
<td>222.25</td>
<td>(1,30) = 103.36, P&lt;.0001</td>
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<tr>
<td>8</td>
<td>102.20</td>
<td>145.92</td>
<td>(1,21) = 2.91, P&lt;.103</td>
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<tr>
<td>9</td>
<td>91.80</td>
<td>203.20</td>
<td>(1,13) = 50.78, P&lt;.0001</td>
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<tr>
<td>10</td>
<td>113.11</td>
<td>113.67</td>
<td>(1,13) = .11, P&lt;.98</td>
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<tr>
<td>11</td>
<td>146.85</td>
<td>160.12</td>
<td>(1,13) = .28, P&lt;.61</td>
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<tr>
<td>12</td>
<td>120.50</td>
<td>178.11</td>
<td>(1,15) = 7.77, P&lt;.01</td>
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<td>13</td>
<td>108.16</td>
<td>167.25</td>
<td>(1,12) = 4.27, P&lt;.05</td>
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</tr>
<tr>
<td>TOTAL</td>
<td>118.02</td>
<td>177.30</td>
<td>(1,442) = 42.05, P&lt;.0001</td>
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TABLE 3
Means Over Three Years

<table>
<thead>
<tr>
<th></th>
<th>BASELINE</th>
<th>TEST 1</th>
<th>TEST 2</th>
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<td>1</td>
<td>86.43</td>
<td>142.62</td>
<td>185.28</td>
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<tr>
<td>2</td>
<td>124.18</td>
<td>180.61</td>
<td>180.33</td>
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<td>131.86</td>
<td>131.67</td>
<td>100.08</td>
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<td>4</td>
<td>99.16</td>
<td>120.54</td>
<td>168.71</td>
</tr>
<tr>
<td>5</td>
<td>136.83</td>
<td>215.77</td>
<td>229.57</td>
</tr>
<tr>
<td>6</td>
<td>108.83</td>
<td>224.62</td>
<td>216.06</td>
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<tr>
<td>11</td>
<td>146.85</td>
<td>179.15</td>
<td>160.12</td>
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<td>120.15</td>
<td>155.77</td>
<td>178.11</td>
</tr>
<tr>
<td>13</td>
<td>108.16</td>
<td>110.00</td>
<td>167.25</td>
</tr>
<tr>
<td>1. Work with teachers to increase their sense of self-worth. (54.47, p&lt; .0001)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Consult with teachers on working with students having low self-esteem. (49.97, p&lt; .0001)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Work directly with students having low self-esteem. (71.18, p&lt; .0001)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Counsel teachers in helping students become successful learners. (63.53, p&lt; .0001)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Promote the importance of student self-esteem with school staff. (67.23, p&lt; .0001)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Help students individually meet with success in the classroom. (52.43, p&lt; .0001)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Assist teachers with instruction to insure student success. (40.79, p&lt; .0001)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>8. Promote the importance of teacher self-concept. (64.13, p&lt; .0001)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Promote the importance of student self-esteem at home. (54.79, p&lt; .0001)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Work with parents to improve their own self-image. (53.29, p&lt; .0001)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Encourage parents and staff to recognize and value a student’s strengths. (41.15, p&lt; .0001)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Work closely with parents to identify a child’s strengths. (59.94, p&lt; .0001)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Communicate and work effectively with all students. (70.41, p&lt; .0001)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Counsel parents, students and staff on an individual basis. (74.28, p&lt; .0001)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
15. Respond quickly and effectively to parent questions and concerns.  
   (65.10, p< .0001)

16. Respond quickly and effectively to staff questions and concerns.  
   (61.07, P< .0001)

17. Work with and explain testing results to parents before a special education 
    staffing.  
   (33.67, p< .0001)

18. Work with parents individually to prepare them to attend to a staffing.  
   (46.30, p< .0001)

19. Spend time in each classroom working with students.  
   (53.74, p< .0001)

20. Assist families in a crisis or stressful situation.  
   (72.39, p< .0001)

21. Counsel students in the event of a traumatic situation (such as a student or staff 
    death).  
   (74.61, p< .0001)

22. Work with parents to encourage parent involvement with children and school.  
   (73.36, p< .0001)

23. Insure the smooth functioning of special education annual and triennial staffing 
    conferences.  
   (30.53, p< .0001)

   (42.73, p< .0001)

25. Monitor the progress and needs of students requiring assistance but who do not 
    qualify for special education services.  
   (73.57, p< .0001)

26. Monitor student progress on the needs and objectives stated on a students IEP.  
   (34.43, p< .0001)

27. Utilize all existing resources to determine a child’s capabilities 
    (i.e. district testing, classroom observations, etc.)  
   (39.21, p< .0001)
28. Identify and focus on a child's strengths.  
   (30.16, p< .0001)

29. Respond quickly and efficiently to teacher needs.  
   (58.56, p< .0001)

30. Consult with teachers on a regular basis.  
   (66.30, p< .0001)

31. Facilitate integration or inclusion of students in the regular classroom.  
   (45.64, p< .0001)

32. Help parents learn to respect their child.  
   (56.65, p< .0001)

33. Help staff respect the wisdom and knowledge of parents.  
   (53.56, p< .0001)

34. Work as an integral part of a school team.  
   (65.17, p< .0001)

35. Monitor student progress in regular classrooms.  
   (55.35, p< .0001)

36. Respond immediately to a crisis or problem in the building.  
   (54.36, p< .0001)

37. Prepare staff to respond effectively to a crisis or problem in the building.  
   (63.92, p< .0001)

38. Follow-up on individual students needs for counseling.  
   (52.34, p< .0001)

39. Organize and facilitate support groups within the school.  
   (58.86, p< .0001)

40. Identify unmet student counseling needs.  
   (69.07, p< .0001)

41. Be proactive in identifying student counseling needs.  
   (81.44, p< .0001)

42. Help staff identify and recognize suicidal behaviors in students.  
   (34.98, p<.0001)
43. Provide leadership in dealing with student affective needs.
   (67.86, p< .0001)

44. Help staff recognize and report child abuse (verbal, psychological, physical, neglect or sexual).
   (54.40, p< .0001)

45. Identify developmentally appropriate instructional techniques.
   (43.01, p. .0001)

46. Help teachers implement developmentally appropriate instruction.
   (38.06, p< .0001)

47. Understand and communicate the range of child development to staff.
   (42.23, p< .0001)

48. Be an integral part of our school.
   (86.99, p< .0001)

49. Provide long-term assistance to students.
   (69.04, p< .0001)

50. Provide services in our schools other than testing students.
   (94.56, p< .0001)

51. Meet individually with student and parents.
   (69.99, p< .0001)
### IEP OBJECTIVE DIFFERENCES

<table>
<thead>
<tr>
<th></th>
<th>Weld Dist. 6</th>
<th>Poudre-R 1</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychological Report Recommendations and IEP Objective Overlap</td>
<td>46%</td>
<td>31%</td>
<td>5.02*</td>
</tr>
<tr>
<td>Recommendations Incorporated Into IEP's</td>
<td>2.67</td>
<td>5</td>
<td>29.80**</td>
</tr>
<tr>
<td>Number of Recommendations per Report</td>
<td>6.82</td>
<td>2.73</td>
<td>23.52**</td>
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*BEST COPY AVAILABLE*
### SIED PLACEMENTS OVER 5 YEARS

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<tr>
<th>YR</th>
<th>90</th>
<th>91</th>
<th>92</th>
<th>93</th>
<th>94</th>
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<tbody>
<tr>
<td>NO</td>
<td>240</td>
<td>227</td>
<td>237</td>
<td>226</td>
<td>199</td>
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</table>

17% REDUCTION, 15% POPULATION INCREASE, 32% DIFFERENCE
DISCIPLINARY ACTIONS CONSISTENT WITH STATE DEPARTMENT CATEGORIES

- Profane Language
- Insubordination
- Destruction of Property
- Fighting
- Disruptive Behavior

[Graph showing categories with corresponding counts]
I. DOCUMENT IDENTIFICATION:

Title: Continuing Validation of Comprehensive Psychology Services to Schools

Author(s): Nelson, Young, Obrecht

Corporate Source: APA

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Signature: R. Brett Nelson
Organization/Address: APA 98 4070 W 7TH ST, BURLINGTON, CO
Forming Staff: R. Brett Nelson, Psychologist
Telephone: 9103562019 FAX: 9103562017
E-Mail Address: brookelyk@gmail.com Date: 11/05/06