

DR. STIRLING MCDOWELL
Foundation
FOR
RESEARCH INTO TEACHING



TEACHING AND LEARNING RESEARCH EXCHANGE

Differentiated Instruction to Support Literacy in the Primary Grades

Myra Dunbar
Cynthia Foster
Jenise Vangool

Project #139
June 2006

This research was partially funded through a grant from the McDowell Foundation. However, the points of view and opinions expressed in project documents are those of the authors and do not necessarily reflect the views of the Foundation.

The purpose of the Dr. Stirling McDowell Foundation for Research into Teaching is to fund research, inquiry and dissemination of information focusing on instruction (both teaching and learning) in the context of the public elementary and secondary education system. Specifically, it will:

- 1) contribute to knowledge about teaching and learning;
- 2) encourage educational inquiry through a wide range of methodologies;
- 3) support the involvement of practising teachers in active research projects;
- 4) encourage organizations as well as individuals to determine and act in areas of research and inquiry; and
- 5) encourage experimentation with innovative ideas and methodologies related to teaching and learning.

The Foundation is an independent charitable organization formed by the Saskatchewan Teachers' Federation in 1991. It is governed by a Board of Directors with the assistance of an Advisory Committee of representatives from the educational and business communities. The selection and evaluation of projects funded by the Foundation is carried out by a teacher-led Project Review Committee. Inquiries concerning research supported by the McDowell Foundation may be directed to the following address:

Research Coordinator
Dr. Stirling McDowell Foundation
2317 Arlington Avenue
Saskatoon SK S7J 2H8
Telephone: 1-800-667-7762 or (306) 373-1660

This project was funded through a generous gift from the Estate of the late Dorothy Rutherford Clarke.

© 2006 by the Dr. Stirling McDowell Foundation for Research into Teaching Inc. Permission is given to use this work for educational purposes, except that authorization from the original source must be obtained for the use of any material that appears in the work with credit to another source.

Acknowledgements

We would like to extend our thanks to the following people who supported our research:

- First, the Dr. Stirling McDowell Foundation, with recognition to the Estate of Dorothy Rutherford Clarke for its financial support of this project.
- Second, the excellent team at Father Vachon School who graciously gave of their time and talents in our centres. We would like to acknowledge them by name: Kathy Ketterer, Erma Laliberte, Janine Ackerman, Tara Scheck, Wayne Craig, Marion Upton, Karren Walker, Charlene Zipchen, Jeff Kostyniuk and Brandi Elder.
- Third, the school administrators Diane Côté and Burton Harper that lent support in encouragement, organization of space and technology, and assistance with students.

Truly it was a team effort.

Dedication

In loving memory of Erma Jean who was always open to new ideas, willing to be part of new initiatives, cared deeply for her students, and had a laugh that was awesome. We will miss you.

Table of Contents

In The Beginning 1

Literature Review 2

The First Step 3

The Who and The How 4

What the Information Collected Told Us..... 12

Setbacks and Limitations 14

The Next Step 15

Bibliography and References 16

Appendices 17

- 1. Assessment Tools List
- 2. Outline for Centre School
- 3. Graphs Showing Improvement in Student Literacy
- 4. Samples of Student Writing

In The Beginning

The big questions in our minds were: why are many of the primary students not reading well and what can we do to help them?

We are Myra, Jenise and Cynthia, the Learning Assistance Teachers at Father Vachon School in Saskatoon, Saskatchewan. Our school has approximately 300 students from kindergarten to grade eight with a diverse mix of cultures and socio-economic groups. Students with special needs are embraced and we have an early intervention program for children with behavior problems. There is also a pre-school that is structured to support children in readiness for school. Our school has a very caring environment for all, students and staff. The administration supports learning for students and encourages staff to reach beyond the norm and give more to our students, therefore becoming better teachers. From this setting an application for a McDowell grant was submitted to study how to better teach the grade ones and twos reading and writing.

Our research question originated from dialogue amongst ourselves about why the grade ones did not have some of the basic skills required to meet the curriculum objectives. Our role in the school is to support classroom teachers in their instruction of students. We wondered how we could reach the students who struggled with basics, those who were “at grade” and those who were performing above expectations. Of course, all teachers encounter this dilemma, but we wanted to try ability grouping across grades, collaborating with all the staff working in the grade one and two classrooms. The team of people that we involved were all very passionate, dedicated and open to new ideas.

Myra, Jenise, and Cynthia led the team and each had a unique insight and background to contribute to the workings of it all.

- Myra had been at the school six years and worked closely with the grade one teacher. Together they had done work with small groups and guided reading. She was concerned about the wide variance in that classroom and the struggle to reach the bottom and top end of students without sacrificing the learning of others.
- Jenise had been at the school ten years and noticed the growing demands on families and the changing demographics of the community that had brought students to school with greater needs. The needs of the children were not only academic, but social as well. She was involved in the implementation of guided reading and saw the use of the four blocks of literacy (Fountas and Pinell, 1996) as a powerful learning model.
- Cynthia had been at the school two years and immediately noticed the warmth of the staff. She felt it could be a safe place to explore and experiment with a new method of instruction to enhance learning.

These three women worked exceptionally well together to see the process from inception to completion. Each one gave of her talents and collaborated with the team in a sometimes whirlwind of activity.

Literature Review

Our project was based on understanding best practice. We were innovative in the way in which we organized the project, collaborated as a team, and carried out our research into teaching and learning. We took many ideas that have been tried in the past and created a unique way to organize, collaborate, and carry out research. Thanks to the support of the McDowell Foundation we were able to use what literature has been telling us for years to put together a large scale reading and writing ability based project.

We looked at the literature regarding good instruction for reading and writing. The *Saskatchewan English Language Arts Curriculum (K-5)* was the first reference we used to guide us. Research about learning disabilities and collaboration among teachers was prominent in the big picture presented in this document.

The curriculum principles state that the strands of speaking, listening, reading, writing, representing, and viewing “are interrelated, interdependent, and reciprocal.” Meaningful and purposeful language experiences at the student’s appropriate developmental level are also principles in the curriculum that were integral in our project. We followed the curriculum instructional suggestions in our centres and used assessments directly from it. We pulled information from grades one, two and three to plan our instruction.

Another document from Saskatchewan Learning that helped guide us was *Teaching Students with Reading Difficulties and Disabilities*. It outlines warning signs for struggling students: recognizing and naming letters, trouble with sight words, and difficulty with letter-sound relationship. As the learning assistance team, we saw these signs in some of our students. We used the Phonemic Awareness: Sample Diagnostic Assessment Form to assess all students in grade one. This form actually originates in the Early Literacy document, also a Saskatchewan Learning document. We used some of the checklists for pre and post testing.

Work by Dawn Reithaug is also cited in *Teaching Students with Reading Difficulties and Disabilities*. Her *Orchestrating Success in Reading* is recommended to supplement instruction. She identifies the same assessment tools and areas for direct instruction for students who are struggling to learn to read. She broke teaching reading into five main components. Our project had snippets from each of these in our centres. Some components, such as phonemic awareness, were taught specifically and directly to the younger students and others, such as fluency and phonics, were taught in conjunction with reading and spelling centres.

We researched how to re-teach or re-pattern the brain in a learning disabled child. One particular book supported our efforts to support young readers and writers. *Overcoming Dyslexia* by Dr. Sally Shaywitz discusses all an educator may want to know about dyslexia and how to teach in a way that reaches a learning disabled child. She says, “Early identification is important because the brain is much more plastic in younger children and potentially more malleable for rerouting of neural circuits.”

Finally, we as teachers followed a collaboration model based on professional learning communities developed by Eaker and Dufour. The belief that we could make

a difference was a strong motivator in our work. It is a fundamental assumption in Eaker and Dufour's collaboration model. We supported each other, tested new ideas, and brainstormed together how to make the idea for our project manageable and successful for both students and staff. We followed the critical corollary questions about what we wanted students to learn, how we would know if they have learned, and what we would do if they hadn't. We truly tried to match good teaching to the student's capacity to learn.

The First Step

Our research question was as follows:

How would ability grouping for a blocked period of time affect growth in literacy when using key components of reading instruction?

We had two objectives. One objective was to evaluate the effects of instruction using specialized teachers in presenting the building blocks or key components of reading to students of like ability. The second objective was to assess teacher satisfaction and feeling of empowerment when using a consistent collaborative approach to teaching reading.

The Who and The How

The primary teachers and teacher assistants in their classrooms did an excellent job of making our project work.

- Kathy, the grade one teacher had been at Father Vachon for a number of years. Her classroom had eleven girls and eleven boys. There were two designated students, and one student who was repeating grade one. There was a wide range of academic abilities among her students.
- Erma had been at Father Vachon for two years and was teaching a grade one-two combined classroom. There were eight grade ones and fifteen grade twos. At the beginning of the project there were no designated students in her classroom.
- Janine has been at the school for six years. Janine taught the grade two-three combined classroom. She had a group of fifteen grade twos and nine grade three students. Some of the grade three students were struggling with low reading levels according to a running record.
- Tara was the teacher for the Early Intervention Program for students in the age category of grades one to three. She had seven students. These children had varying academic, behavioral and emotional abilities, and were welcomed into the large group.
- Charlene, Wayne, Karen, Jeff, Marion, and Brandi were the teacher assistants who facilitated stations.

In the spring of 2005 our Principal, Diane Côté, approached our Learning Assistant Team and asked if there was anything new we would like to try in our service to the classrooms. We discussed how we often overlap what we do in the classrooms and how we might be able to support a larger number of students in their varying abilities if we could group students across grades. We decided that we would make our application to the McDowell Foundation and were very excited to be accepted. We then met with the primary team to share our idea and the news that there would be adequate resources and time to support our efforts. The teachers were open to the idea and the planning began.

Myra, Jenise and Cynthia did some homework over the summer and collected information and ideas about what would be the best way to teach the skills to the grade ones and twos. When we arrived at the school in September we were surprised to find there were more students in grades one, two and three than we had expected. We decided to include not only the grade ones and twos, but also the grade two-three combined class. This decision pushed the number of students to over seventy. The real work then began as we now needed to come up with how we would group, instruct and move that many students in a small space.

At the end of September, 2005, we did running records for the students in grades two and three. They also completed a spontaneous writing sample and a spelling test. The grade ones did a phonemic awareness assessment, letter identification, and a sight word quiz. The grade ones in the grade one-two classroom did the first eight

words of the spelling test. From the running record results we placed the students into like ability groups. Instructional reading levels were benchmarked. We had a solid chunk of assessments to begin and benchmarks to measure growth with.

We had three colour wheels that each denoted one set of groups, and within that wheel the students were further divided into four groups. The green wheel students were the non readers and those below level 4. In this group were mainly our grade one students. We did our best to separate the students in that green wheel group into small groups of five students with similar skills. The second wheel, the blue wheel, had students with reading levels from 4 to 9. The blue wheel had four groups that included students in all three grades. Finally, those students in the high wheel, which we called the black wheel, read at level 10 and beyond.

The real challenge was to sort out the logistics of who would be instructing what, and where. The teacher assistants who worked with us took time to learn the programs. A set of behavior expectations with consequences was outlined that all staff knew. There was a teacher assistant who roamed during centre time and handled any behavior problems. Materials like pencils and papers were in each station and books were organized for guided reading. The students had colour-coded name tags that correlated with the colour wheels. A calendar was given to each instructor that indicated where each group started every day. Management wheels were created as a visual organizer to be hung in the work areas to tell students and staff where the group in the colour wheel was to move to next.

A picture of one of the colour wheels is given below to show how there were four centres with four groups rotating through each one of the centres. The picture shows the colour wheel for the black group, with each arm of the wheel as a sub-colour of that wheel. For the black group, there were centres for guided reading, working with words, guided writing and guided writing extended. The green and blue wheels were the same with only the activities varying slightly. The green wheel had learning centre activities on phonemic awareness, guided reading, spelling for letter identification, and listening centre/computers. The blue wheel included guided reading, guided writing, computers, and spelling.



Finally, the computers were loaded with the Essential Skills Sight Words and Phonics program, or at least we thought they were. Unfortunately the computers did not save all the students' work. At long last the students were gathered in the library for centre school (see appendix 3). We had one practice day. The first couple of days were slightly confusing, but the students caught on to the process very well and enjoyed it.

The first session of centres began October 11th and finished December 2nd. We had a half-day planning time prior to, during and after our first session. There was a three-day break during report card and interview time. The centres were used five days a week for the first three weeks. The teachers found that although the centres were running smoothly, they did not have enough time in their own individual classrooms to complete work they needed to finish. The teachers were also somewhat unsure of the exact skills in which their students were receiving instruction in each centre. At our mid-session meeting we decided collectively to have the centres in operation four days a week. This decision alleviated much of the stress that the teachers encountered and gave them time in their classrooms with their own students.

Instruction for the green group was tailored for non- and emerging readers.



The spelling instruction centred on alphabet awareness from *Words Their Way*.



The listening centre was a variety of books on tape. The students were required to do a journal response to the book.



Phonemic awareness lessons were taken from Elliott, Barbara, *A Resource Manual for Teaching Phonemic Awareness Skills in the Early Grades*.



The skills taught in guided reading were primarily awareness of print. Many “big books” were used.



The blue group, our middle group, used multiple copies of leveled guided reading books and followed the outline for reading skills in the provincial curriculum. The focus was to increase interest in reading, book knowledge and reading strategies.



In spelling students followed CVC short vowel patterns from *Words Their Way* and explored rhyme with different fun activities.



These students used the Essential Skills sight word software during the computer centre.



The writing centre for both the blue and black groups was similar. Students worked through the following stages: prewriting, drafting, revising, editing and publishing.



Students in the black group expanded their writing skills through editing and learning the importance of choosing a form, function and audience for their writing. The black group had two centre times for writing.



In addition to the writing centres, the black group did guided reading focusing on genera, and spelling.



In spelling the students concentrated on word endings and vowel patterns from *Words Their Way*.

The second round of centres was much more relaxed and enjoyable. It began on February 20 and ended April 7. We repeated the running records again and made some adjustments to the groups. The teachers, having experienced instruction in a certain area, had a better sense of what to expect and some chose different areas to instruct. There was a week off in preparation for report cards and interviews. We also kept centres to four days a week, allowing teachers more time in their classroom directly with their students. To conclude our centres, a special celebration was planned to highlight for the parents some of the student's new reading skills. A "Literacy Café" was put on by the students.

What the Information Collected Told Us

There was learning in all that we did. In relation to our research question about growth in literacy, we found that all students gained in their reading levels. Their growth was interesting to watch as some started slowly, others gained steadily, some grew after the second round, and still others seemed to come to a halt in skill development but then gained slowly. We have included bar graphs in the appendix that illustrate the results of our reading tests. It was interesting to see the correlation in growth in phonemic awareness skills to reading levels. This growth was in our green group, which was our lowest group.

Our objective to study the effects of instruction with the building blocks of reading demonstrated the interconnectedness of the skills needed to read. Our second objective, to assess teacher satisfaction with the collaborative approach, proved difficult to measure. Although all the teachers regretted not spending enough time with their students, they were also open to repeating a similar process next year. One of the four teachers throughout our centre time expressed her preference for teaching her students in her classroom.

We made a list of what our student and teacher surveys told us and have also included some observations we made during centre time:

- In response to three questions about centres meeting their students' needs and improvement in the students' skills, all the teachers saw an improvement in reading. The teachers in the combined classrooms also saw improvement in writing.
- One teacher commented that the intense instruction truly benefited her low end students.
- When we surveyed the students about each of the four centres they used, we got the following results:
 - In order of preference, the green group liked the listening centre, then the phonemic activities, letter activities and finally guided reading.
 - Students in the blue group almost unanimously liked computers, then spelling. They liked guided reading and writing equally.
 - The black group liked all their centres equally.
- In the second session, students' responses to the survey questions had changed somewhat:
 - Students in the green group enjoyed the listening centre the most, followed by phonemic awareness activities. They were evenly divided on guided reading and spelling.

- In the blue group all students liked the computers. Most enjoyed guided reading and spelling equally with a few students rating their opinion of it as impartial. Writing was liked but there were a few students who really did not like it
- There was more variation in the black group in their second set of responses. Guided reading was liked, writing got some impartial opinions, and there was a mix of like-impartial-dislike for spelling.
- The teachers all agreed on the second survey that their students had made definite improvements in both reading and writing; one teacher wrote, “Students learned and loved it!”
- A teacher wrote that she enjoyed getting to know students from the other classrooms.
- Teachers listed their thoughts, both positive and otherwise, about the student groupings:
 - “It was easy to pinpoint the problem each child was experiencing and address it right away.”
 - “The groups were small and I was able to meet the academic needs of all students.”
 - “I saw noticeable progress.”
 - “...I think the classroom mix can work as an incentive to some kids to learn from their peers.”
- Students made comments like:
 - “I like reading the stories we wrote.”
 - “I like doing rhyming.”
 - “I learned how to read better.”
 - “... learned how reading makes sense.”
 - “...learned bigger words in bigger books.”
- The students didn’t like:
 - waiting for other groups to finish,
 - that computer records were erased,
 - other people reading out loud when they were reading,
 - not being able to read the book well

Setbacks and Limitations

There were a few setbacks experienced in the time and space for our project. The first involved the actual time that we asked teachers to give. They struggled in our first blocked time period because we had centres every day. This daily pattern made it difficult for teachers to do all they wanted with the students from their individual classrooms. It also put a strain on classroom teachers as they attempted to do first term report cards. Secondly, it was difficult to find enough actual physical space in the school building to have eleven groups totaling seventy children moving through the centres. The fact that we had four classrooms, hallways, the staffroom and a work room made it a challenge. The students adapted fairly well, but it was hard to work in small spaces and have room to support instruction with visuals.

We thought that a computer centre would provide good drill and practice for sight words and phonics skills. Unfortunately, there were problems in the program with tracking, three computers were stolen, then, in a heavy rain storm the roof gave way and leaked all over two more computers. The listening centre was expanded to offset the computer woes. It was disappointing that the computers did not work as we had hoped, because they were motivating for the students, and the repetitiveness of the program would have reinforced basic skills.

There was one last limitation that was unforeseen by our researchers. It did not hinder our work, but it awakened our awareness of teachers' possessiveness towards their students. It was hard for teachers to let go and have someone else teach very basic and important skills to their students. One teacher said, "I enjoyed them to begin with but then as time went on I really didn't. I prefer to do centres in my own class, that way I would be able to fit in those subjects I am missing at that time like journals and printing."

The first couple of weeks were a challenge for some groups as there were some behavior problems. Students were testing the waters with new teachers, and the way we had grouped them was not the best for the weaker students who were struggling and had attention troubles. The second groupings were more positive.

The Next Step

Our McDowell project had given us the support that we needed to try a new model to teach literacy in our school. It was exciting to know that the work we started would be continued next year. There was time blocked in our school to do centres again. Although some movement of students across grades was anticipated, it was planned that the classroom teacher would have more direct supervision of her own students. The second year might not be as intense as this first experience because we now had a foundation for us to meet student's instructional needs across classrooms. The project had also opened the classroom doors for teachers to share both their students and ideas.

It was with some sadness that our project and another school year came to an end. Yes, all good things must come to an end, but our Learning Assistance Team would not be together next fall. New challenges and roles awaited each teacher. Myra was moving into the role as lead Learning Assistance teacher at Father Vachon while Jenise moved to another school to continue as a learning assistance teacher and assume a vice-principalship. Cynthia was taking some time to enjoy being a new mom. Our project was a great experience and it left behind the ground work to be flexible in the way reading and writing can be taught in the primary grades.

Bibliography and References

- Bear, Donald, Johnston Francine, Invernizzi Marcia (2004) *Word Sorts for Letter Name Alphabetic Spellers* Columbus, Ohio. Pearson
- Bear, Donald, Johnston Francine, Invernizzi Marcia (2004) *Word sorts for within word pattern spellers* Columbus, Ohio. Pearson
- Bear, Donald, Johnston Francine, Invernizzi Marcia (2006) *Letter and picture sorts for emergent speller* Columbus, Ohio. Pearson
- Bear Donald, Invernizzi Marcia, Templeton Shane, Johnston Francine (2004) *Words Their Way*. Columbus, Ohio. Pearson
- Beaver, Joetta. (2001) *Developmental Reading Assessment K-3 kit*. Parsippany NJ Celebrated Press
- Eaker, Robert, Dufour, Richard (1998) *Professional Learning Communities at Work; best practice for enhancing student achievement*. Bloomington Ind. National Education Service
- Elliott, Barbara, (1996) *A Resource Manual for Teaching Phonemic Awareness Skills in the Early Grades*
- Fountas, I. C. & Pinnel, G.S. (1996) *Guided Reading: Good First Teaching For all Children*. Portsmouth, NH. Heinemann
- Reithaug, Dawn. (2002) *Orchestrating Success in Reading*. West Vancouver, BC. Stirling Head Enterprises Inc.
- Saskatchewan Learning. (2000) *Early Literacy: A Resource for Teachers*. Regina, SK, Saskatchewan Learning
- Saskatchewan Learning. (2002) *English Language Arts a Curriculum Guide for the Elementary Level (K-5)* Regina, SK, Saskatchewan Learning
- Saskatchewan Learning. (2004) *Teaching Students with Reading Difficulties and Disabilities a Guide for Educators*. Regina, SK. Saskatchewan Learning
- Shaywitz, Sally MD. (2003) *Overcoming Dyslexia a New and Complete Science Based Program for Reading Problem at any Level*. New York NY, Vintage Books
- Walker, Catherine (1999) *Pushing the pencil*. Edmonton, AB Edmonton Public Schools

Appendix 1: Assessment Tools Used in the Project

ASSESSMENT TOOLS

Running Records from *DRA Reading Assessment Kit*

Phonemic awareness checklist from SK Learning

Writing Sample rubric from *Pushing the Pencil*

Spelling Inventory from *Words Their Way*

Letter Identification

Student Survey

Teacher Survey

Appendix 2: Outline for Centre School

Center Guidelines

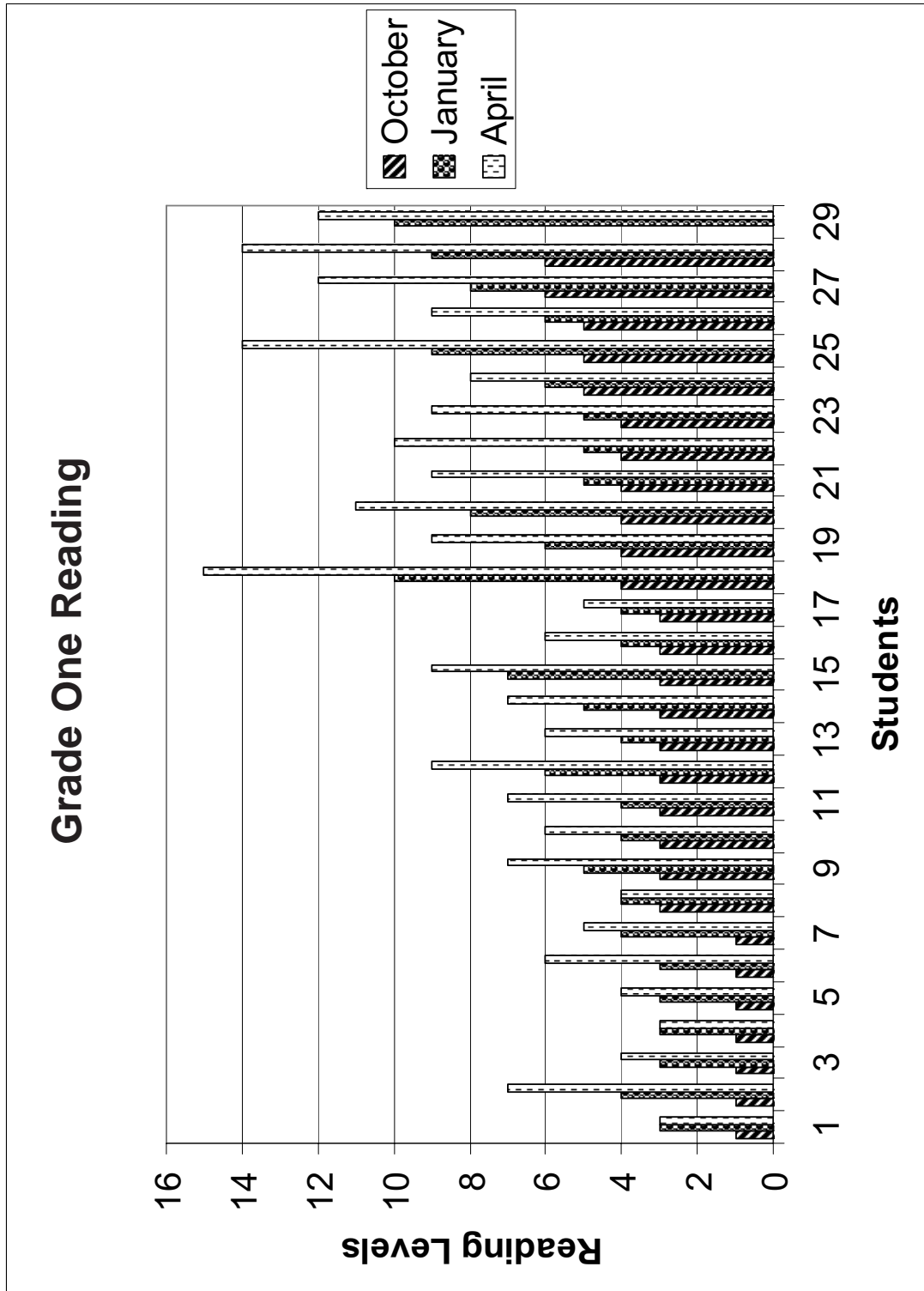
Today is center school. We are not doing work today; we are practicing how to move.

We will introduce the teachers that you might be working with.

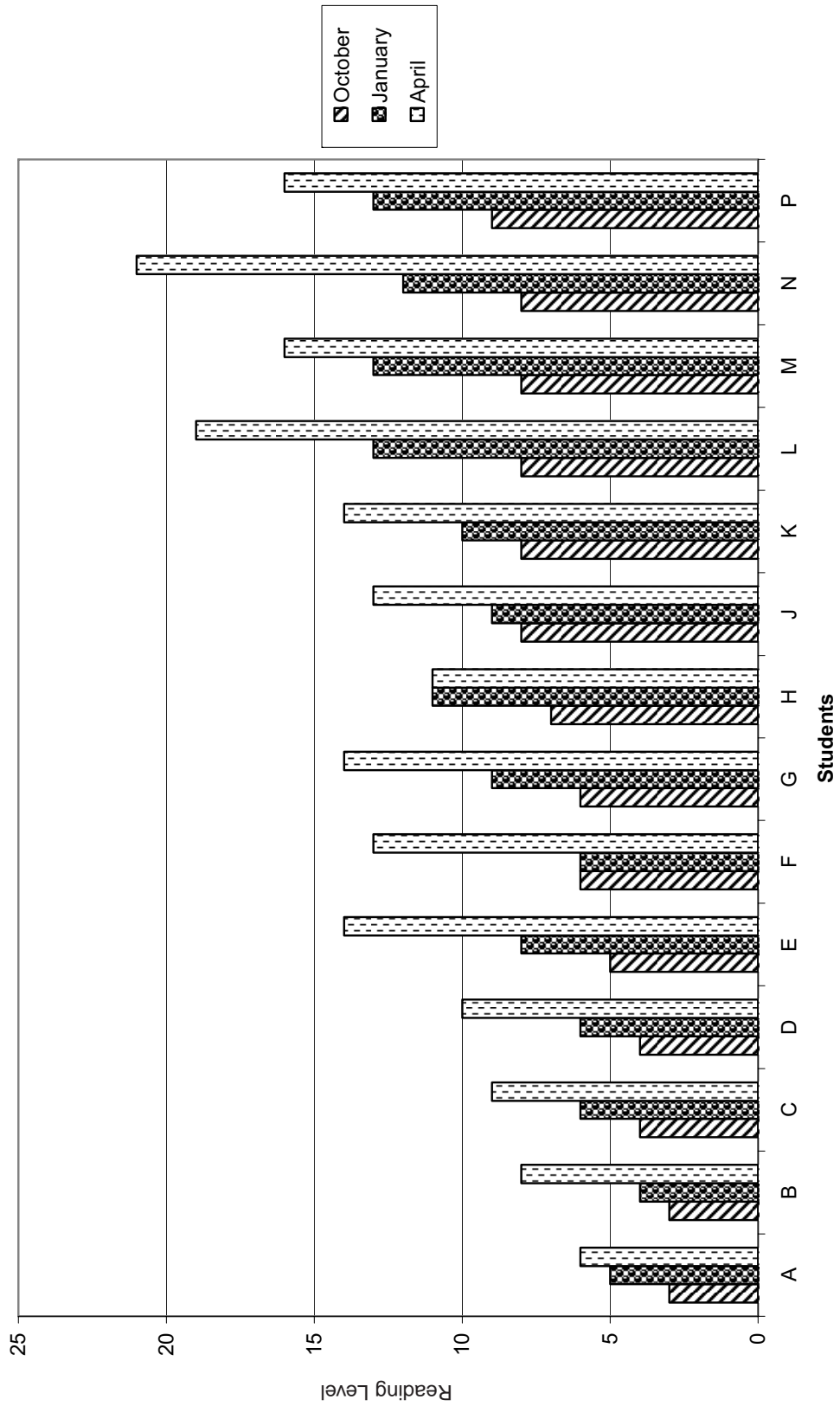
- Centers will be Monday-Friday @10:40-11:40.
- Each student will rotate through three activities a day. You will rotate every 20 minutes. (Today you will rotate every 5 minutes.)
- You will be working with other teachers, not just your own.
- You move to your next station by walking and not talking.
- The name tag color is the color of your group and tells you where you need to start.
- Only teachers can move the wheel.
- You need to come in quickly after recess and get your name tag ready. When your teacher tells you to go into your groups, you can go.
- This might be hard to remember at first and you might make some mistakes, but we will learn together.

Everyone will become better readers and writers!

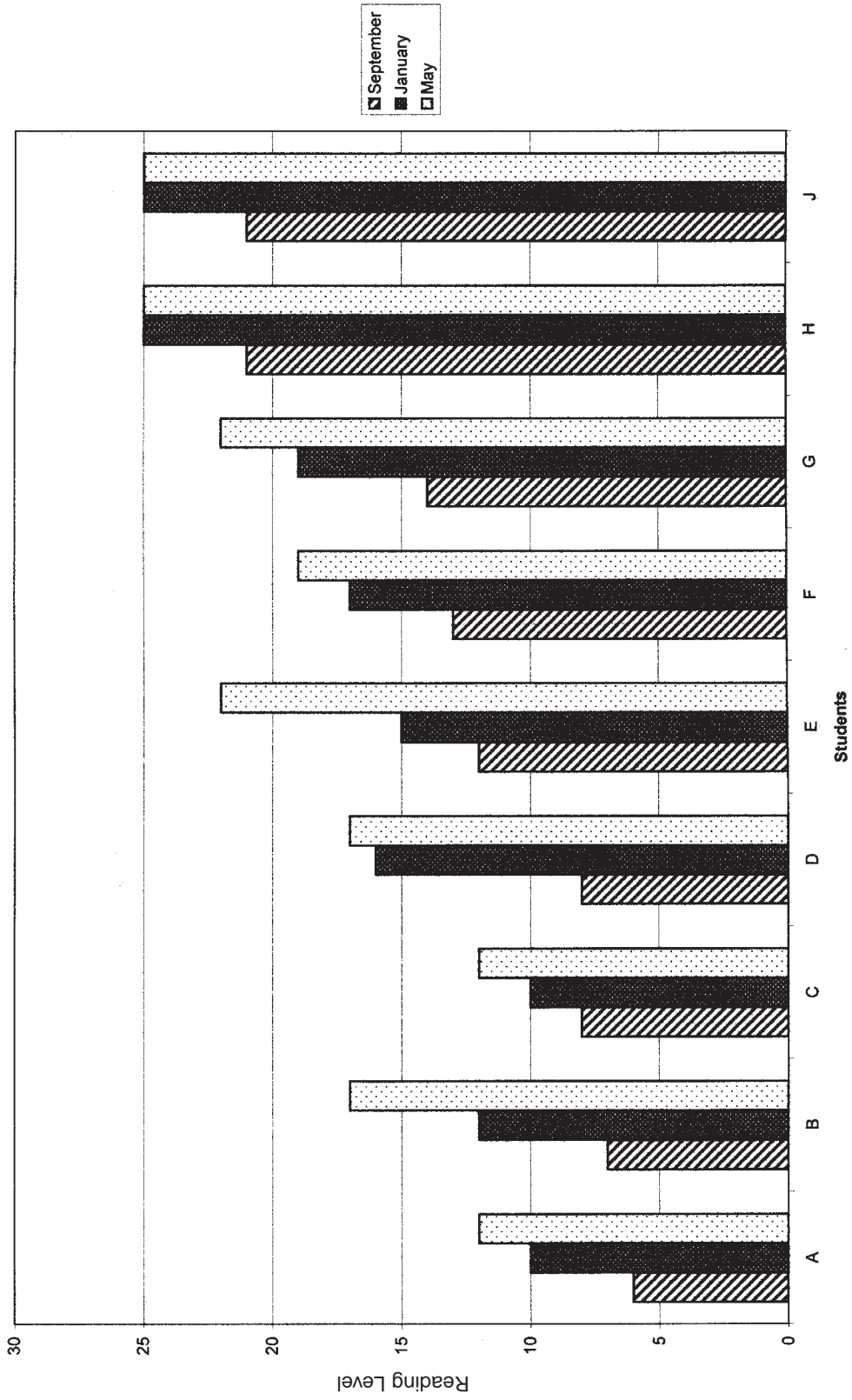
Appendix 3: Graphs Showing Improvement in Student Literacy



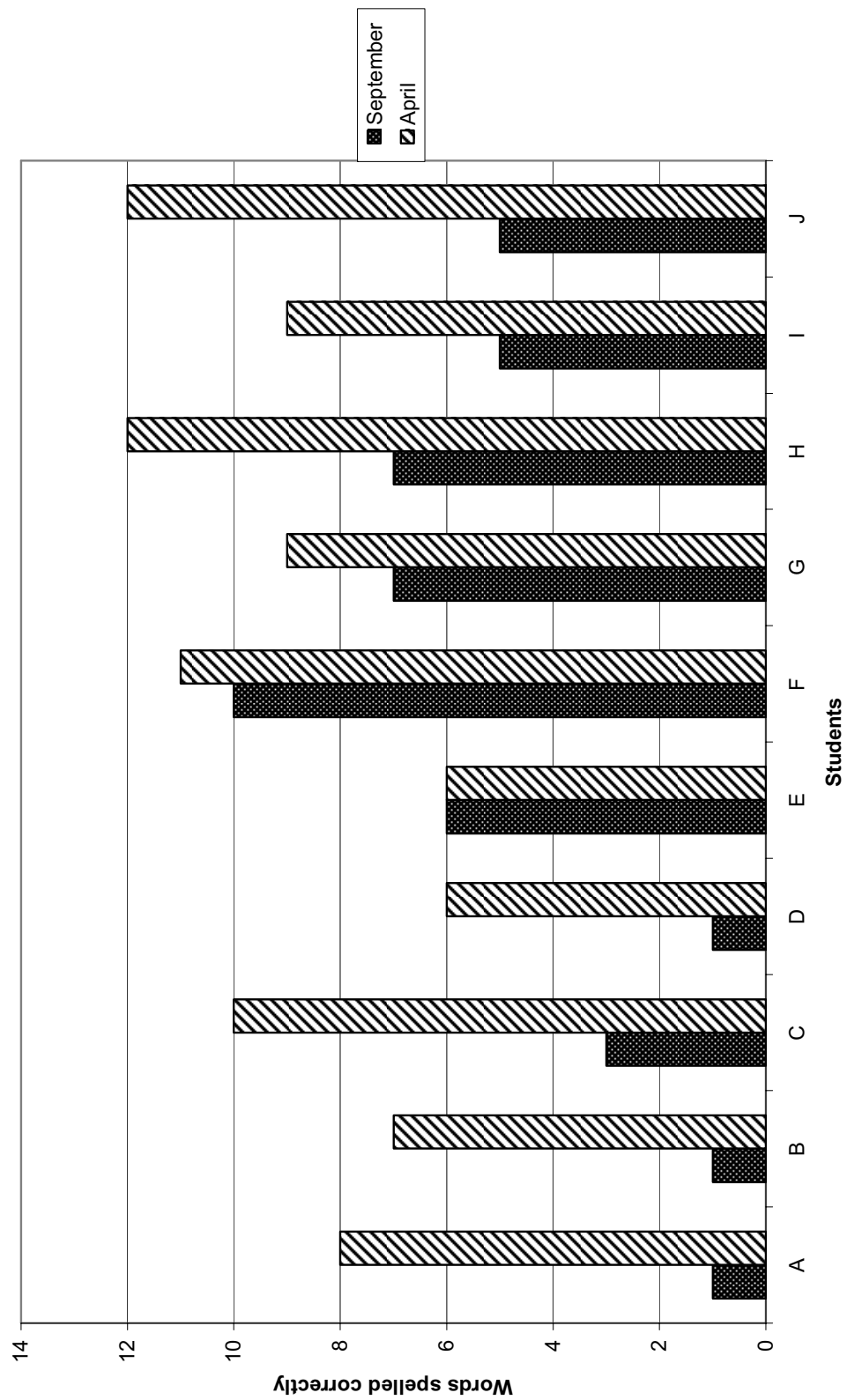
Grade Two Reading



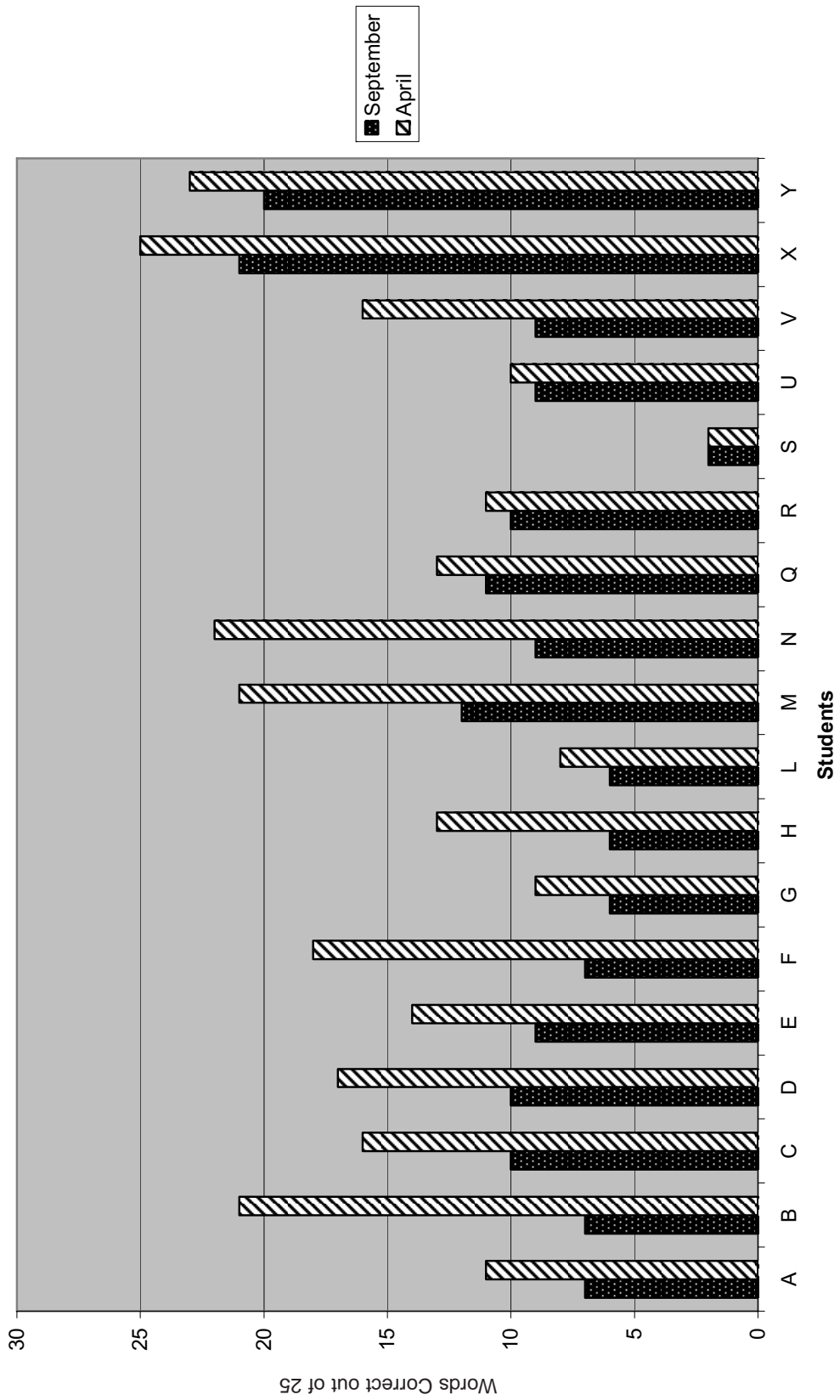
Grade Three Reading



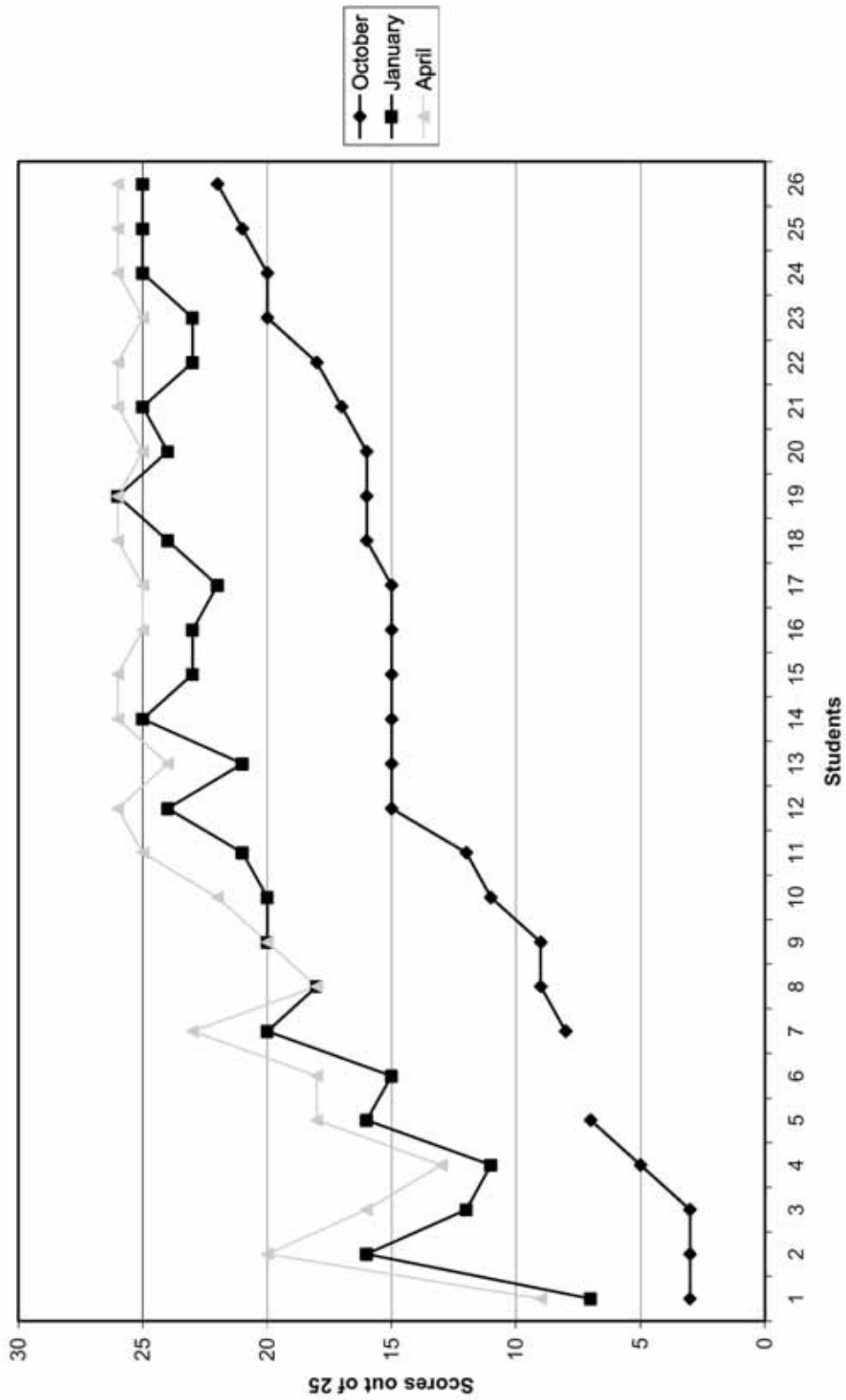
Spelling Grade 1/2-Words Correctly



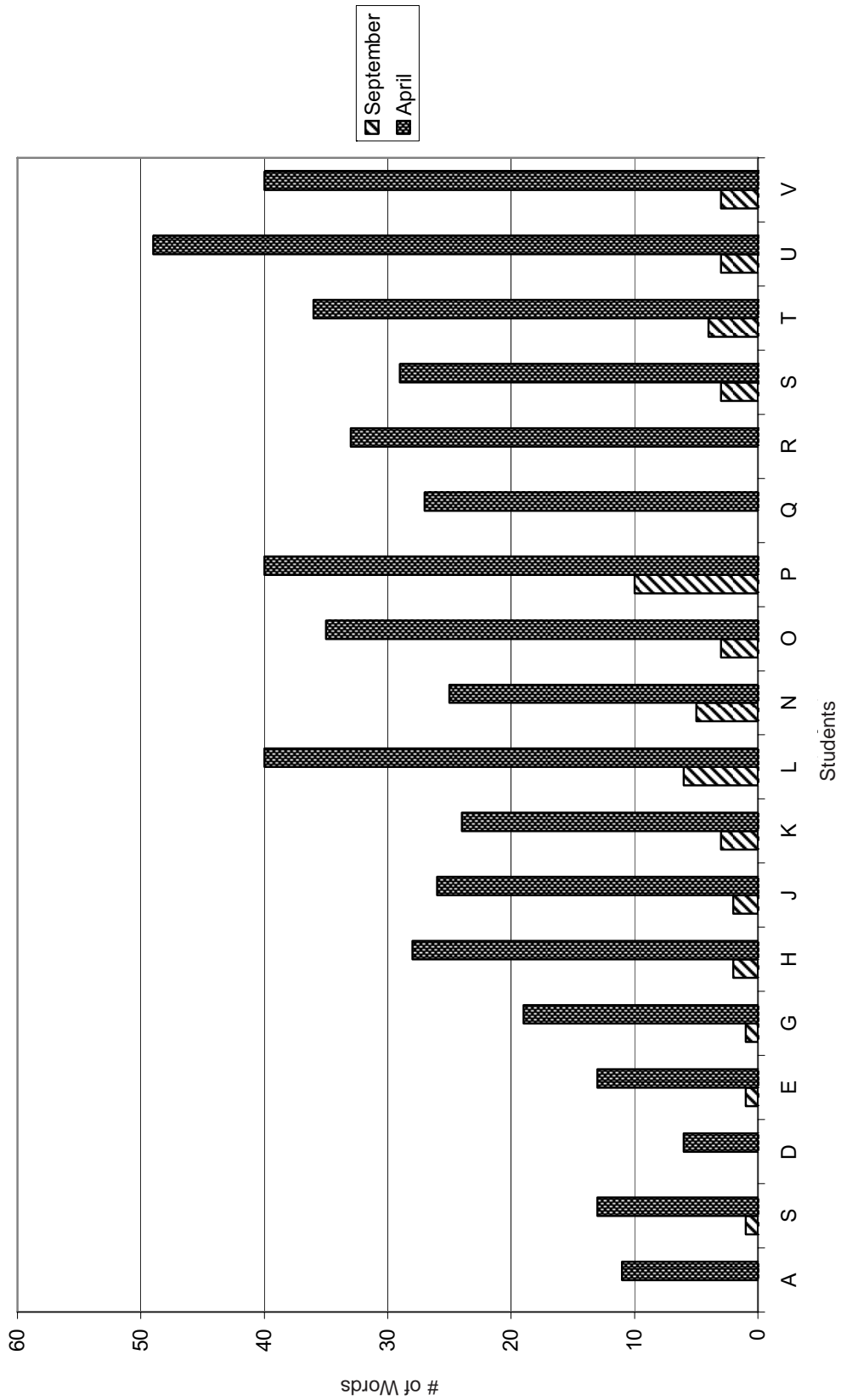
Spelling Grade 2/3-Words Correct



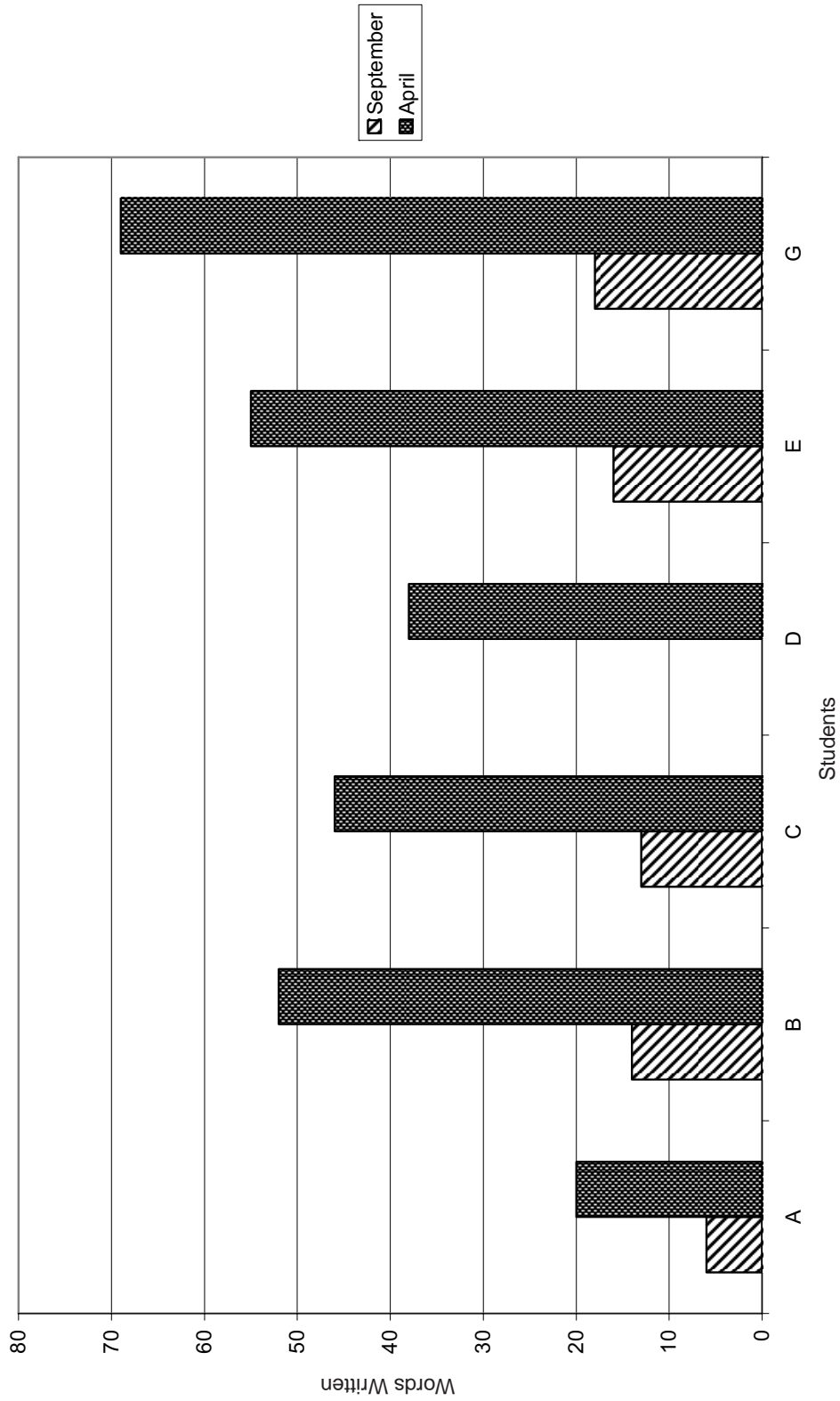
Grade One Phonemic Awareness



Spontaneous Written Words – Grade Two

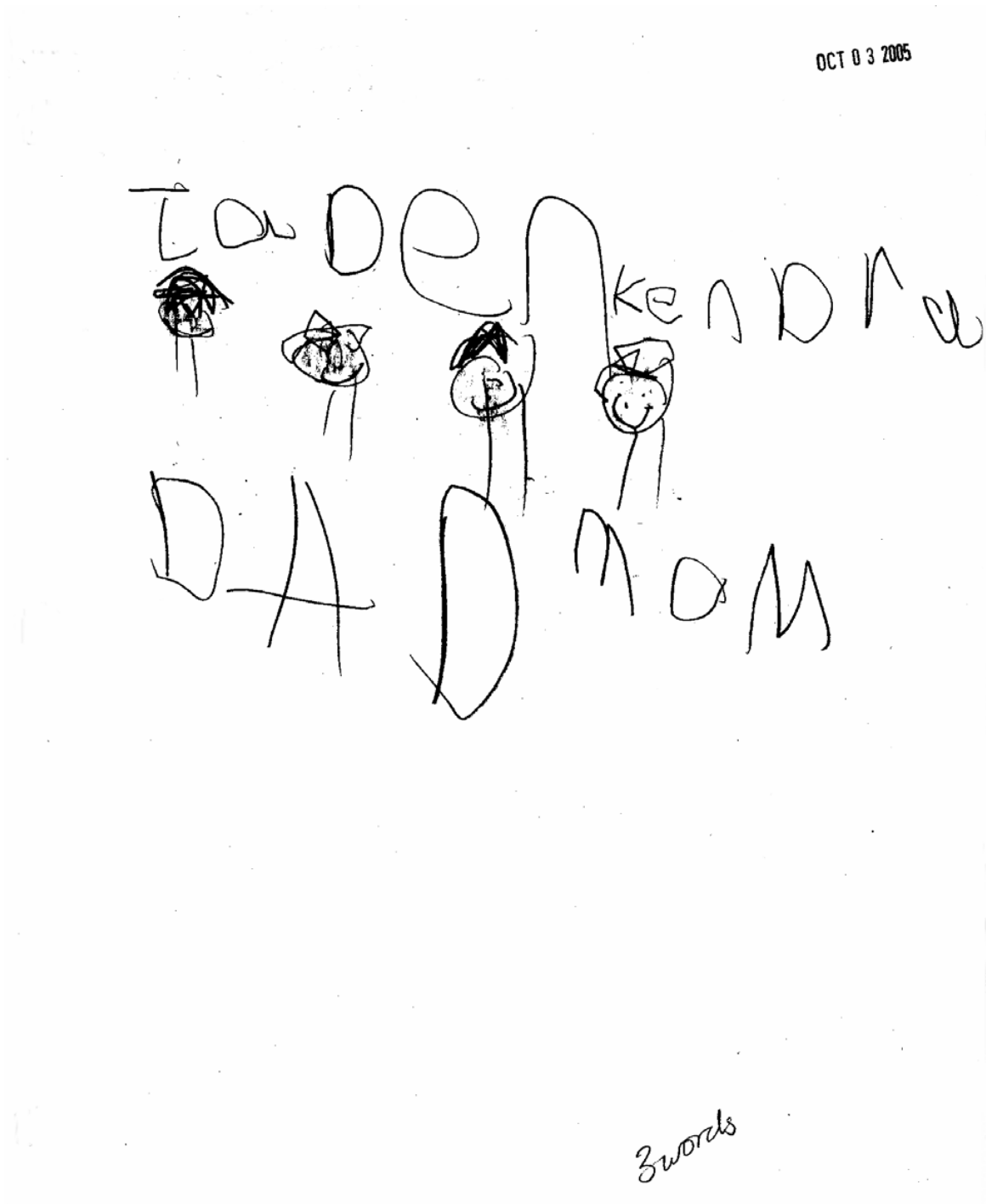


Spontaneous Written Words – Grade Three



Appendix 4: Samples of Student Writing

Grade One Writing Sample



MAY 2 2006

dog owl way ✓
cat rabbit May ✓
fly bee Austin ✓
red Mackenzie ✓
bird puppy ✓
Tadpole meowing ✓
kitten can ✓
Love I see ✓
Mom I pla ✓
Dad I two ✓
Megan P I ✓
Megan A I Love you ✓
Megan H BENNETT ✓
School
My ✓
To ✓
bark ✓
By ✓

35 words

Grade Two Writing Sample

Thursday September 20th
my dad was to go with my
I took it to eat apples
I was at a Bobing when I was

MAY 09 2006

one day I went to my friend Dan
at school I like Dan's dog
when we got there we played
the first we played ~~sketch~~
board and then we played ~~rising~~
and then we played a different
rising at then we start played
toy and we were front with the
toys and we start drawing
and I want home

**2317 Arlington Avenue
Saskatoon SK Canada S7J 2H8
Phone: 306-373-1660
Toll Free: 1-800-667-7762
Fax: 306-374-1122
E-mail: mcdowell@stf.sk.ca**

www.mcdowellfoundation.ca