Abstract

This paper introduces an electronic learning environment (interactive website) through which experienced and prospective teachers, parents, K-12 students and others can learn about the rubrics (holistic and analytic scales) that are used for assessing students’ progress in language arts. Also included will be a brief analysis of the data gathered by the beta version of the site, including the comparative scores of different user groups. The goal of the interactive website is to help raise the level of children’s language arts achievement by familiarizing teachers, education students, and parents with assessments as applied in the provincially-developed analytic and holistic scoring rubrics. Because of the global nature of curricular frameworks, the rubrics and the educational goals defined in the research project are widely applicable.

Introduction

Assessment is an ever-present issue in education, whether it concerns accountability, teacher practices, improvement of student learning, or education students’ acquisition of evaluation competencies. This paper introduces an electronic learning environment (interactive website) designed as an instrument for familiarizing prospective teachers with provincial curriculum and assessment practices, including the rubrics (both holistic and analytic scales) that are used for assessing students’ progress in language arts. The site is also intended as a professional development tool through which experienced teachers may confirm the accuracy of their in-classroom assessments. Until recently, the site has

1 The website and research is a collaborative project between Department of Education personnel (Educational Statistics and Testing Branch), the Newfoundland and Labrador Teachers’ Association, the Centre for Distance learning and Innovation (CDLI), and the local university (Faculty of Education), who view themselves as partners in accountability for educational quality.
displayed only assessments related to English Language Arts. The site is currently being expanded to include mathematics-related assessments, beginning with primary (grade 3).

The Department of Education of Newfoundland and Labrador (DoENL) since the 90s has introduced assessments to reflect changes in curriculum that include expanded literacies, outcomes-based learning, and Essential Graduation Learnings. More recently, the DoENL has added other literacies to the assessment package. Children still write demand and process pieces, but they also read narrative and informational texts with prose and illustrations, read poems, respond to mostly visual advertisements, and demonstrate listening skills. Responses to questions asked about these texts are primarily written, but the students are also required to fill in a chart or draw a picture. A provincial panel of teachers using rubrics developed for the purpose scores all these tasks.

The interactive learning site, www.learnrubrics.ca, includes samples of children’s demand and process writing, and their responses to narratives, informational texts, poems, and visual texts. Eight samples of children’s work in each category, at grade levels 3, 6, and 9 are provided for scoring using the departments’ rubrics. See Appendix A for a list of texts for scoring. Site visitors read the work, consult the rubric, and submit their score for each piece. See appendices B, C, and D for examples of this process. Immediately their score is presented with the provincial panel’s and other users’ scores for comparison and the panel’s assessment of strengths and weaknesses of the piece is provided for learning purposes (Appendix E). The site user can then go on to score other pieces.

Teacher Education and Professional Development

Teachers are encouraged to use the same kinds of tasks for classroom assessments, and to score them using the provincial rubrics. (Note that appendix D shows an holistic rubric; appendix F shows an analytic scoring rubric). This attempts to ensure that the yearly provincial assessments match both mandated curriculum and daily practice in schools. Linn, Baker and Dunbar (1991) indicate that “[p]roviding training and support for teachers… is essential. But
validity teaching for success on these assessments is a challenge in itself and pushes the boundaries of what we know about teaching and learning. Because we have no ready technology to assist on the instructional side, performance gaps may persist” (p. 18). I suggest the website I am describing is “ready technology”. The site also has great potential for training future provincial scoring panels, ensuring that as many teachers as possible are involved in the assessment process.

Education students have opportunity to familiarize themselves with children’s writing, representing (in drawings), and reading responses and to compare their assessments of these answers with trained teachers’ scores. As new assessments are introduced, like the mathematics assessments currently being added to the site, education students can learn about the tests and the kinds of responses children offer.

In any school system, where educational quality is always a concern, assessment issues, including fidelity to learning objectives and processes, efficiency, year-to-year comparability, year-to-year similarity in prompts and tasks, racial/ethnic fairness (Linn, Baker and Dunbar, 1991), are important. In addition to these validity factors, other considerations such as the “intended and unintended effects on the ways teachers and students spend their time and think about the goals of education” (Linn et al., p. 17) should be considered. The NL assessments (and the interactive learning site) encourage teachers and future teachers to read a variety of kinds of texts with students and to ask them to respond in a variety of ways, such as illustrating their understanding of a poem’s meanings and charting information, rather than limiting testing to written questions and answers (see appendix G). Teachers and interns can draw on their experience with holistic and analytic rubrics on the interactive website, and their practice scoring children’s texts, to confidently evaluate their students’ work in their classrooms.

**Assuring Reliability in Scoring Assessments**

One of the issues related to performance assessments is reliability. Those responsible to such assessments need to assure that, irrespective of task, raters
using the rubric will score consistently. Research indicates that elements to ensure such consistency include training, monitoring scoring, acceptable inter-rater reliability rates, and size of sample needed to establish reliable measurement (Crehan, 1997). The Department of Education of Newfoundland and Labrador, a partner in this research, regularly recruits and trains teachers to use rubrics for their large-scale assessments. This is an expensive and time consuming process, requiring the removal of teachers from their classrooms employment of substitute teachers (who are not always easily available in rural NL) and the expense of travel and accommodation whole they practice scoring writing samples. My supposition is that this process can be equally well handled through an interactive website that provides this same practice, in a closed web environment, to the selected teachers. Other web-based technologies like discussion boards can be utilized for the more social and qualitative aspects of the learning. The rubric and how to use it might be explored, questions about others’ scoring discussed, examples of the strengths and weaknesses observed in the writing shared, disagreements worked out, and consistency and community built among the scoring panel before they assemble on site at the DoENL offices to score the actual assessments. The website can also be used by raters to assure themselves individually that their scores are consistent with those previously determined (intra-rater reliability).

Research Potential of the Site WWW.LEARNRUBRICS.CA

Research data, available only to the researchers, is collected on the interactive website in the form of statistics that describe users’ scoring patterns. E-mail addresses provided by users will also permit researchers to ask users of the site to respond to a questionnaire that inquires about their opinions on the site, the use of rubrics in their classes, their changing practices, and their attitudes toward provincial assessments. (This research is yet to be conducted.) Thus various kinds of data can be analyzed to learn about the web learning environment, the use of analytic rating scales, and the effectiveness of instruction for prospective teachers and professional development for teachers when new kinds of assessments are implemented.
For the pilot study, two broad research questions were explored: Is the site a good learning tool? Is the site a good research tool? For this research, to be reported elsewhere, part of one set of data collected in the beta site was used – the scores for the eight pieces of writing in the primary category, as scored by in-service/experienced teachers and pre-service/prospective teachers. The scores for the selections were standardized, for ease of viewing, from a 1-to-5 scale to a 0-to-6 scale. This re-scaling creates a more accurate visual representation of difference (Appendix H).

Educational Importance of the Study

This project is important in a number of ways. First, it is important that we identify efficient, effective ways of expediting professional development for teachers. With the introduction of the Atlantic Provinces Education Foundation (APEF) curriculum and the provincial assessments, on-going in Atlantic Canada since 1996, teachers have been required to learn different practices for teaching and assessing learning. Time, geography, and financial and human resources have mitigated against the efficient provision of the needed professional development experiences; thus innovative methods for the provision of in-service learning opportunities are important.

Also important are practical educational experiences for pre-service teachers. Opportunities for interacting with and evaluating students’ actual texts are essential if the students are to be well prepared to assume their role as teachers in their own classrooms, responsible for assigning grades and thus influencing the futures of their students.

Thirdly, it is important for universities and departments of education to collaborate on projects of mutual interest that impact the quality of education in a region. It is also important that researchers in faculties of education critique and challenge the practices of departments of education, based on solid study.

Finally, this research demonstrates an innovative use of technology in educational improvement. The specially-designed software has the potential for use by other educational institutions and school districts. Indeed, this website is
being expanded to incorporate assessment of mathematics and other disciplines. The site design can be applied in other jurisdictions as well as expanded over time to accommodate changes in Newfoundland and Labrador.

References


Appendix A
List of Texts for Scoring

Which Academic Level would you like to work in?
- Primary
- Elementary
- Intermediate - More coming soon
- High School

Which Genre would you like to work in?
- Demand Writing 2002
- Demand Writing 1996
- Informational Text Reading Response
- Listening
- Narrative Text Reading Response
- Poetic Text Reading Response
- Process Writing 2002
- Process Writing 1996
- Visual Text Response
Appendix B
Informational Reading Assessment, Grade 6, with Display of Student Response and Holistic Scoring Rubric

Elementary (Grade 6)
Informational Text Reading Response

Sample D

Click here to view the story "Wild & Wonderful Newfoundland"

1. If you did not live in Newfoundland and you read this text, what are three things from the text that might convince you to visit Newfoundland? Use information from the text to explain why these would be appealing.

I think I thing that might convince me would be all the types of birds especially the puffins. Number 2 would be all the sorts of whales. And number 3 would be all the creatures on land like black bears, lobsters, beavers, and caribou.

2. Which experience in Newfoundland do you think Kiera enjoyed the most? Why do you think that?

I think Kiera enjoyed the part when she tried her luck at whale watching. I think she loved it when she saw a humpback whale jump out of the water and onto it’s back. I also think she liked that because that was the first time she saw a whale in Newfoundland.

3. One characteristic of narrative text is that it tells the story. What characteristic make this text a form of informational text? Complete the chart. Explain how each characteristic is demonstrated in the text.

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Support from the Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>This test gives it gives info.</td>
<td></td>
</tr>
</tbody>
</table>

prejudice, inequality
- Strong ability to interpret figurative language
- Strong ability to identify features of text and types of text (e.g., punctuation, capitalization, titles, subheadings, glossary, index, literature genres)
- Strong ability to read orally (i.e., with phrasing, fluency and expression). Misuses do not affect meaning.

○ Level 3 - Adequate
- Good understanding of text, comments predictive and sometimes supported from the text
- Adequate ability to personally connect with and extend on text, with responses that are mostly literal
- Fair ability to detect point of view (i.e., bias, stereotyping, prejudice, inequality)
- Adequate ability to interpret figurative language
- Good ability to identify features of text and types of text (e.g., punctuation, capitalization, titles, subheadings, glossary, index, literature genres)
- Good ability to read orally (i.e., with phrasing, fluency, and expression). Misuses occasionally affect meaning.

○ Level 2 - Limited
- Limited understanding of text, comments rarely insightful or supported from the text
- Limited ability to personally connect with and extend on text
Appendix C

Informational Reading Assessment, Grade 6, with Display of Assessment Text for Site User to Consult
Appendix D
Informational Reading Assessment, Grade 6, with Display of Student Response, Holistic Scoring Rubric, and Site User’s Selected Score (Ready to Submit)

Elementary (Grade 6) Informational Text Reading Response

Sample D

Click here to view the story “Wild & Wonderful Newfoundland!”

1. If you did not live in Newfoundland and you read this text, what are three things from the text that might convince you to visit Newfoundland? Use information from the text to explain why these would be appealing.

I think 1 thing that might convince me would be all the types of birds, especially the puffins. Number 2 would be all the sorts of whales, and number 3 would be all the creatures on land like black bears, lobsters, beavers, and caribou.

2. Which experience in Newfoundland do you think Kiera enjoyed the most? Why do you think that?

I think Kiera enjoyed the part when she tried her luck at whale watching. I think she loved it when she saw a humpback whale jump out of the water and onto its back. I also think she liked that because that was the first time she saw a whale in Newfoundland.

3. One characteristic of narrative text is that it tells a story. What characteristic makes this text a form of informational text? Complete the chart. Explain how each characteristic is demonstrated in the text.

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Support from the Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. This text gives you</td>
<td>1. This text gives you information about whales and other animals in Newfoundland.</td>
</tr>
<tr>
<td>Information about</td>
<td></td>
</tr>
</tbody>
</table>

Evaluation Rubric

Level 5 - Outstanding
- Complex understanding of text, comments insightful and always supported from the text
- Outstanding ability to personally connect with, and extend on text, with responses that often extend beyond the literal
- Outstanding ability to detect point of view (i.e., bias, stereotyping, prejudice, inequality)
- Outstanding ability to interpret figurative language
- Outstanding ability to identify features of text and types of text (e.g., punctuation, capitalization, titles, subheadings, glossary, index, literature genres)
- Outstanding ability to read orally (i.e., with phrasing, fluency, and expression)

Level 4 - Strong
- Strong understanding of text, comments often insightful and usually supported from the text
- Strong ability to personally connect with, and extend on text, with responses that sometimes extend beyond the literal
- Strong ability to detect point of view (i.e., bias, stereotyping, prejudice, inequality)
- Strong ability to interpret figurative language
- Strong ability to identify features of text and types of text (e.g., punctuation, capitalization, titles, subheadings, glossary, index, literature genres)
- Strong ability to read orally (i.e., with phrasing, fluency, and expression). Issues do not affect meaning.


Appendix E
Informational Reading Assessment, Grade 6, with Display of Feedback for Web Scorer

Sample: Informational Text Reading Response: Elementary - Sample D

My Scores:
Level 3

Provincial Panel Scores:
Level 3

Provincial Panel Comments:

Strengths
- shows some critical understanding of text, which is sometimes supported from the text
- shows ability to analyze text
- has some ability to identify features of text

Learning Needs
- to improve the use of comments from text for support
- to improve knowledge of features of text
- to improve critical understanding of text
Appendix F
Analytic Scoring Rubric

Elementary (Grade 6) Process Writing 2002

Instructions
Students completed three writing pieces: one process piece and two demand pieces.
Process writing took three days to complete. Students began by participating in a brainstorming session, completed an organizational chart, wrote a first draft, peer conferenced, edited, wrote a final copy, and proofread.
The topic was general. Write about an experience that caused strong feelings in your life.
Process writing is scored using an analytic rubric that describes level of performance for six elements of writing: content, organization, sentence fluency, voice, word choice, and conventions.

Bad Times, and Good Times

My mom and dad are two very different people. Well, dad, to satisfy him, you need to give him an enormous challenge. He always needs something to do. Mom on the other hand would rather sit back and peacefully relax.

When I was eight, my parents actually noticed that they had nothing in common. So they got a harsh separation. At first, when my pillow swallowed my head each night, I would cry and cry. I just thought my dad had to work all the time. I couldn’t accept the fact that he lived in a different house. However, I didn’t understand that if they were together, there probably wouldn’t be a single exiled second in the house.

Finally we decided that we would see dad every Tuesday and

Evaluation Rubric

Writing Category: Content

The Content category describes how effectively the writer establishes a purpose, selects and integrates ideas (i.e., information, events, emotions, opinions and perspectives) and includes details (e.g., evidence, anecdotes, examples, descriptions, and characteristics) to support, develop and/or illustrate ideas.

☐ Level 5: (Outstanding)
  - The writing is clear and strongly focused. Ideas and details support and enhance the central theme.
  - The writing demonstrates an outstanding knowledge of the subject matter.
  - The writing includes ideas and details which are very often creative and always purposeful.
  - The writing reflects an outstanding control and development of content.
  - The writing demonstrates an exceptional ability to shape and connect ideas.

☐ Level 4: (Strong)
  - The writing is clear and focused.
Appendix G
Children’s Responses Include Visual Representations of the Text’s Meaning

4. What do you think the author means by the ending sentence “May he know lonely”?

I believe the author means that he wants the owner to see the dogs place to feel the way the dog feels lonely, he wants the owner to realize how harsh he’s being on the dog. If someone treats a living animal bad, they don’t deserve to be treated any better.

5. Illustrate the poem to show your understanding.

![Illustration of a house and a dog]

Evaluation Rubric

- **Level 5 - Outstanding**
  - Complex understanding of text, comments insightful and always supported from the text
  - Outstanding ability to personally connect with and extend on text, with responses that often extend beyond the linear
  - Outstanding ability to detect point of view (i.e., bias, stereotyping, prejudice, inequality)
  - Outstanding ability to interpret figurative language
  - Outstanding ability to identify features of text and types of text (e.g., punctuation, capitalization, titles, subheadings, glossary, index, literature genres)
  - Outstanding ability to read orally (i.e., with phrasing, fluency, and expression)

- **Level 4 - Strong**
  - Strong understanding of text, comments insightful and usually supported from the text
  - Strong ability to personally connect with and extend on
Appendix H

Comparison of Scores

Primary #2 - My Dinosaur Adventure

- Content
- Organization
- Sentence Fluency
- Word Choice
- Conventions

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<th>Pre-service</th>
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<td>Conventions</td>
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