

# **NORTH LAKES STATE COLLEGE**

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## **Evaluation of the LEXIA Computer-based Phonics Program**

**Term 2, 2008**

## **TRIAL REPORT**

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## AIMS

- To explore the efficacy of the LEXIA Computer-based Phonics Program in helping to advance the reading skills and achievement levels of students with Learning Difficulties.
- To explore the efficacy of the LEXIA Program in engaging and motivating adolescent students.
- To determine the most effective way of incorporating the LEXIA Program in the classroom literacy schedule and secondary timetable.

## METHOD

- Ten students of mixed gender, from Years 8 and 9 were selected to form a pilot group to participate in the LEXIA trial. All participants were Learning Support students, Program/ Adjustment Type 3 and 2, from established Foundation classes.
- The pilot group was initially timetabled for a daily 30 minute session, Monday to Friday, for eight weeks of Term 2. Effectively, however, this time was reduced to 25 minutes three times per week for the Year 8 students, largely due to specialist subject commitments. Students were escorted to their respective classes upon completion of the LEXIA session, to minimise disruption. Remaining Foundation class members and selected Support students from other Year levels experienced LEXIA for approximately 25 minutes once or twice a week.
- Each student participating in the trial was individually tested using the LEXIA Quick Reading Test, which focussed on phonemic awareness, phonics/ decoding and Dolch sight words. Automatic enrolment in *Strategies for Older Students* occurred, in accordance with the suggested placement level. HOLBORN Reading ages were also revised prior to the commencement of the Program.
- Participants were supervised at all times, in order to provide individual instruction as required, effective monitoring of student performance and engagement, praise and encouragement.
- The LEXIA Cognitive Development Cross-Trainer was used as an incentive to complete all units of an activity column. Students were also rewarded with a certificate and goody-bag upon completion of a level.
- Post-testing, using the LEXIA Quick Reading Test and the HOLBORN graded reading scale, was conducted during the initial weeks of Term 3.

## DISCUSSION

- The LEXIA Computer-based Phonics Program was effective in helping to advance the reading skills and achievement levels of students with Learning Difficulties. Pre and post-test analysis revealed notable improvement among all participants in the trial, with remarkable results demonstrated by the three Year 9 participants who consistently attended daily and one Year 8 student. Advancement in reading ages for most students also exceeded expectation, with the exception of one Year 8 student who, according to the HOLBORN scale, showed no measurable gain in reading age during the trial period. However, this Program/ Adjustment Type 3 student demonstrated a highly significant gain in spelling performance, far exceeding her peers. In consultation with the class teacher, the LEXIA routine will be extended with progressive checks undertaken throughout the term, culminating in a more comprehensive post-testing regime.
- The LEXIA Program was effective in engaging and motivating adolescent students. The high level of engagement, motivation and satisfaction among participants, 12 -15 years of age, was surprising and encouraging, given that all members of the trial were recognised as some of our lowest performers in the school system. Though not part of the official trial; other Support students, up to 17 years of age, who had the opportunity to experience LEXIA, also exhibited high levels of engagement, motivation and satisfaction, and expressed a keenness to attend on a more regular basis.
- The early morning scheduling of Year 9 students, 8:30 – 9:00am, proved the most effective and productive, largely due to the fact that their school day commenced with LEXIA. No time was lost, therefore, in the movement between classes and associated requirements at the commencement of a lesson. The scheduling of Year 8 students during session 2 of the school day, 9:55 – 10:25am, was not as productive due to the aforementioned reasons and specialist subject commitments. It would be desirable in the future to maintain the early morning session and schedule the second target group to attend straight after the morning break.
- Twice a week, during regular timetabled English lessons, remaining Foundation class members were rotated through LEXIA, once the pilot group were returned to class. This rotation was highly effective in the Year 8 class where the classroom teacher had firmly established the routine of independent reading (SRA Reading Laboratory), structured writing with the teacher and LEXIA. Being located within close proximity of the two Foundation classes also proved conducive to the efficiency of the rotation. Continuation of the LEXIA Program for the pilot group and fellow class members will continue in this fashion during Semester 2.
- The scheduling of other Support students to participate in LEXIA was largely negotiated with respective classroom teachers, based on individual need and the capacity to provide peripheral supervision, even though the focus was on another group of students working in the room at the time. This proved effective and provided an additional

emotional benefit for some of our at risk/ behaviour management students.

- Use of the LEXIA Quick Reading Test, as a diagnostic tool, was most effective in identifying deficit areas and determining the correct placement level for each student. A detailed, comprehensive report was immediately generated. The entire process of administering the test and producing a student report was completed in a tenth of the time that it would normally take manually. Patterns and trends also emerged; for example, the non-recognition of both short and long vowel sounds and inappropriate application to words containing the silent-e was evident among all participants. Such information may assist curriculum planners of preceding Year levels.
- The Cross-Trainer provided an exciting inducement to the students, particularly the boys, as the use of the controller was both appealing and considered *cool*. The students looked forward to using the Cross-Trainer on the completion of an activity column.
- The LEXIA Program inherently facilitated a high degree of curriculum differentiation, explicit instruction and individual attention. At any given time, up to 7 students (maximum number of computers available, including teacher laptop) were able to work independently on a specific skill, receiving auditory and visual explanation, direction and automatic feedback, at a level appropriate to their individual needs, further supported by teacher clarification/ assistance, praise and encouragement.
- The LEXIA Program inherently facilitated a high degree of student empowerment and recognised variances in learning style. Individual students were autonomous in selecting units of work and changing the type of activity within their designated Level. Students were able to listen and see skills being modelled, command instructions and explanations to be repeated and engage in seeing, hearing and manipulating letters, syllables and words for themselves. The setting of personal goals was a spontaneous affirmation for most students, although not a requirement of the Program.

## **ANECDOTAL DATA**

The following comments, from both students and staff, are examples of spontaneous reactions to the LEXIA experience:

- “It’s the earliest I’ve ever seen them to class.”
- “It’s cool to wear earphones.”
- “It really shows what they can’t do.”
- “I reckon my spelling’s got better.”
- “I have gone from a D to a B in my report. My Mum will be pleased.”
- “The rotation is working well. Short bursts of activity keeps their focus, their concentration.”
- “Take me, can I come?”

- “Getting to use the controller is a good carrot, especially for the boys.”
- “It’s the first time I have seen him sit still for that long.”
- “This must be the quietest room in the school.”
- “I’m pumped!”
- “Look! I’ve gone up a level.”
- “When can I come and do LEXIA?”
- “I’m reading every night at home now.”
- “It’s great how they have to manipulate the words. I think it appeals to all learning styles.”
- “Repetition allows for consolidation and I don’t think they get enough of that.”
- “I want to get to the top so that I can use the Cross-Trainer tomorrow.”
- “She was so proud of herself, trotting out with her goody bag.”
- “Sport’s been cancelled. Can I come and do LEXIA?”
- “I think my reading’s got better.”
- “Those kids’ results are really amazing.”

## **CONCLUSION/ RECOMMENDATION**

The findings of the current study clearly demonstrate the remarkable success of the LEXIA Computer-based Phonics Program in assisting low achieving students to advance their reading skills and achievement levels.

This result is consistent with the research findings published in the *Journal of Research in Reading*, May 2006, VOL.29 [2], pp. 162-172 and more recently, in a report released by *The Florida Center for Reading Research*, [www.fcrr.org/FCRRReports/index.aspx](http://www.fcrr.org/FCRRReports/index.aspx).

It is therefore strongly recommended that the LEXIA Program be incorporated within the literacy schedules of students identified as having Learning Difficulties, including those who have fallen below National Literacy Benchmarks.