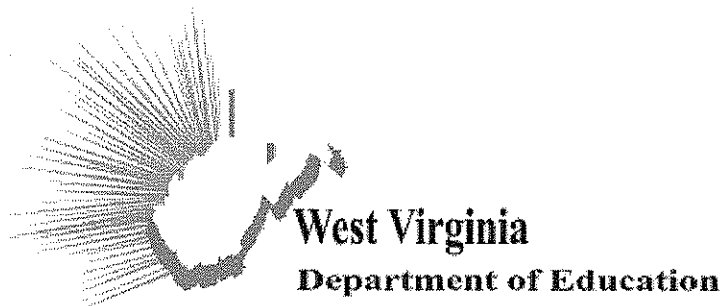


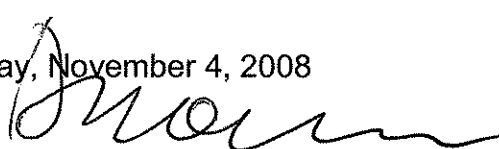
**Evaluation and Research Proposal:
Documenting Results from West Virginia's
National Pilot *Alternative Identification and
Reporting Initiative***

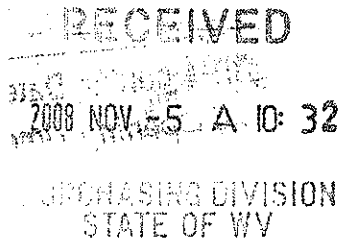
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Tuesday, November 4, 2008


(s) Dale Mann, Managing Director



Documenting Results from West Virginia's
National Pilot *Alternative Identification and Reporting* Initiative

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Documenting Results from West Virginia's National Pilot *Alternative Identification and Reporting* Initiative

Executive Summary

Over the last 10 years, Interactive, Inc. has conducted third-party education program evaluations with the West Virginia Department of Education in 24 of the state's counties. We are a national firm of "gold standard" program evaluators listed on the US Department of Education, Institute of Education Science's *Registry of Outcomes Evaluators*. We have conducted 200 similar large-scale analyses of improvement programs including an on-going statewide analysis of Virginia's Rtl pilot programs.

This quasi-experimental, mixed methods analysis will equip the WVDE with practical information to improve the existing AIR initiative and extend it to other schools and levels in the state plus to regional and national jurisdictions.

Interactive, Inc.'s methods include several unique features to provide the state with valid and compelling data about AIR.

1. A population study of the AIR schools---100% of the classrooms in AIR schools that have Tier III students plus a matched sample of non-AIR schools
2. Key data collection instruments---teachers, administrators, students plus a classroom observation protocol--- already prepared in draft for review and revision by WVDE followed by early deployment
3. Triangulated data collection: quantitative web-surveys and qualitative protocol-driven interviews and classroom observations
4. Unobtrusive data collection using speaker phones and direct observation through video-conferenced vignettes
5. Child-friendly data collection for AIR-eligible students with casual-setting peer interviews, fixed stimulus free-response video vignette data collection and eye movement analysis
6. Parent and sibling data collection
7. Empirical information on the underlying Rtl program as a bonus and as a context for the interpretation and future dissemination of AIR trends
8. An ROI analysis of costs-foregone and savings realized
9. A National advisory group to assist the state with regional and national adoption




















1.0 West Virginia's AIR initiative: Background and purpose

The state seeks a third-party empirical documentation of processes, practices and outcomes from what may be a national model to replace conventional, disability-based labeling of students with curriculum-based, instructionally-centered descriptors. The expected results for students, teachers, schools and parents include (1) minimizing low expectations, (2) increasing opportunity to learn, (3) increasing achievement, (4) decreasing behavior and related problems and (5) maximizing help for children in need of continued services.


2.0 The Alternative Identification and Reporting Initiative.

West Virginia is testing an important step beyond the discredited 'ability/achievement discrepancy' model. The state has secured the regulatory flexibility for some schools and teachers to forego attaching labels of disability to IEP-eligible students and instead (1) identify those children in connection with curriculum-specific needs and (2) provide specific personalized instructional and behavioral support for individual students.

This is a cohort monitoring study that focuses on students who are in Tier III and who have been diagnosed with one or more of the following: (1) specific learning disability; (2) emotional/behavioral disorder; (3) "mild mental impairment" or (4) other health impairment (including ADHD) or orthopedic impairment¹. AIR students will have gone through Tiers already and have been found to need "continued services" as in TIER III. All will be eligible for IEPs. This analysis follows the progress of these children as (hypothetically) they receive successively intensive assistance (and assessment) in their school's RtI program. (Note: in the table below, our data collection and analysis is focused on the third and fourth columns---Tier III and IEP, special education.)

Hypothetical Progression of One Class of 2nd Graders Through the Academic Year by RtI and/or Special Education Stages			
Hypothetical Progression of a Small Group of AIR-Eligible Students. Assume a class of 24 students including 4 eligible for AIR and IEPs.			
September	December	March	May
Universal assessment.	4 students are at Tier III. Further data indicates that one should be recommended for an IEP	1 additional student is recommended for an IEP. 1 is retained in Tier III	2 AIR-eligible students are receiving special education services
The General Sequence of Services			
RtI Tier I: Primary interventions	RtI Tier II: Secondary interventions	RtI Tier III: Tertiary interventions	Special Education
 universal assessment  diagnosis  prescription from diagnosis  core instruction for all students including AIR eligible and general education  cycle repeats	 assessment, diagnosis  prescription  instruction with smaller groups, more frequent sessions for example, <i>Reading First</i> interventions  some students referred to Tier III	 assessment  diagnosis  prescription  instruction with smaller groups or individuals, more intense, more frequent and with [appropriately leveled material?]  some students	 assessment  diagnosis  prescription  instruction with intense, frequent and often individual instruction for example, <i>Reading Mastery</i>  plus related

¹ Students with severe and profound conditions are not included.

 some students referred to Tier II		referred to special education	supports
---	--	-------------------------------	----------

The unique value of West Virginia's pilot is that teachers will not have advance categorizing and labeling information. The selection committee will provide teachers with two things. First, the committee will provide each student's performance described in terms of their mastery of the state's CSO's --- "novice", "partial mastery", "mastery" or "above mastery". Second, the committee will estimate how long it may take to help the child move from one CSO/mastery category to the next. Will the lack of an "official" label cause IEP teams to write "Present levels of academic achievement and functional performance" based on the CSO's in a way that effectively informs instruction?

In an average classroom of 24, there may be two to four students who are the focus of the AIR procedure (the incidence of AIR and/or IEP-eligible students in West Virginia ranges from 5% to 10% of enrollment²). This study brackets all AIR-identified students regardless of their location on the sequence of tiers. But there is a particular interest in students who are at Tier III Rtl. What differences if any are there between the assistance they receive at (a) Tier III and (b) through conventional special education programs?

We will distinguish between services at the Tier III and special education stages by collecting the following data for each classroom:

- (1) The curriculum being used (described by publisher, type of delivery f2f v digital, etc.);
- (2) the size of the instructional group which is also an indicator of "intensity";
- (3) the duration of any instruction with any given component (how long teachers and students spend with the same material);
- (4) the frequency of instruction with any given component (repetitions of the same material);
- (5) the type of "special support"³ if any and especially
- (6) the absence/presence of disability labels.

Those data allow us to answer several key questions: does AIR inform the instructional and other practices of teachers? What practices are associated with fewer referrals in the Rtl sequence? And, what is the relation between labeling practices and outcomes for any of the variables introduced above (for a detailed discussion of our methods, see 9.0 and 10.0 below).

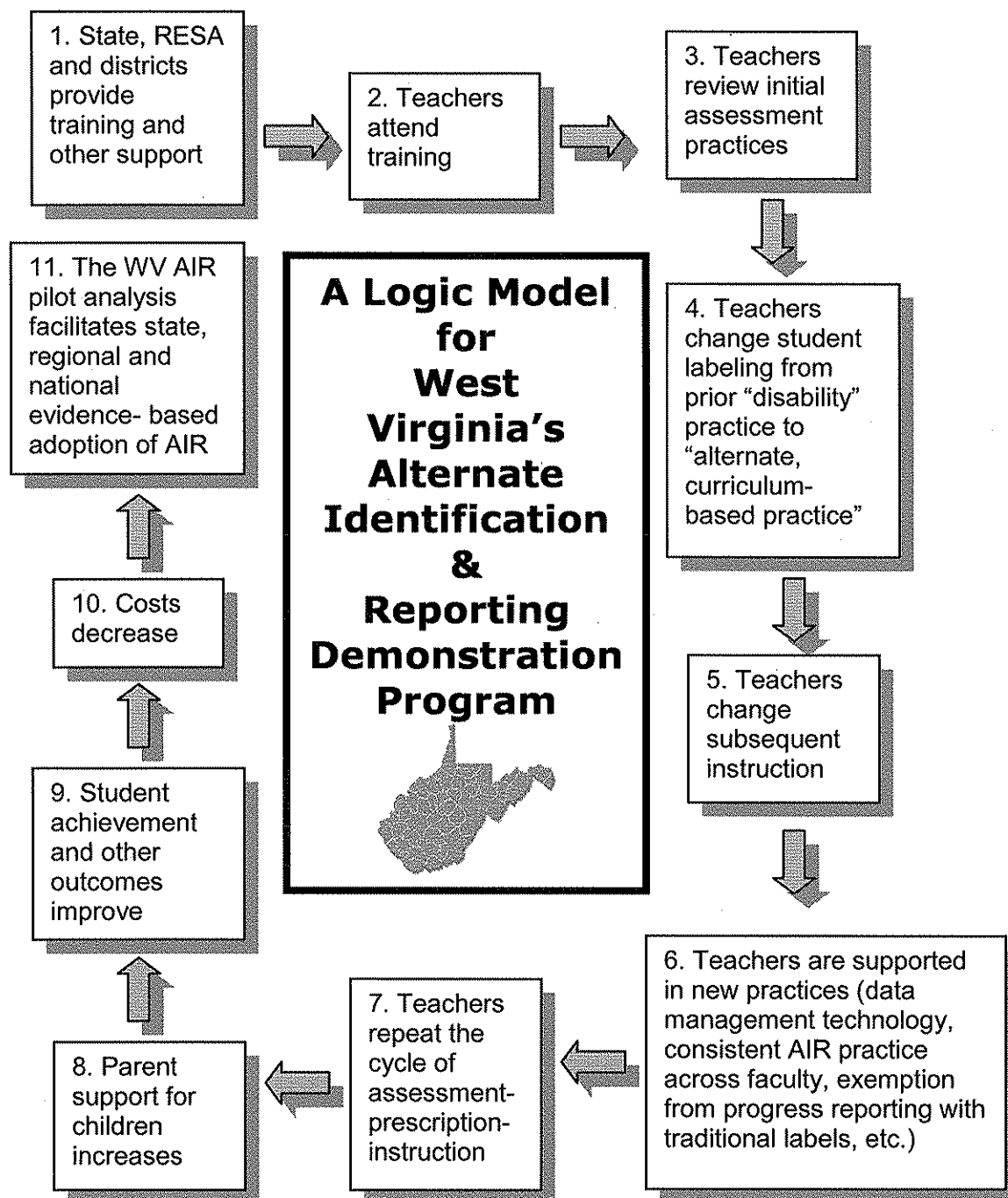
² On a state-wide basis, this proportion is 17%-16% which measures the urgency of this initiative.

³ Some students identified for the AIR program will have presenting considerations that deserve special professional attention. This category preserves that expert consideration tailored to their needs.

The replacement, "alternate identification" language is intended to be less invidious, less associated with expected disabilities and more connected to general performance that may reasonably be expected of all students.

3.0 Outcomes or results

The AIR initiative, the pilot and its intended outcomes can be depicted as a logic model (see below)



Those outcomes depend on the implementation of the Rtl model and the AIR support procedures, the willingness and ability of teachers to change their language and its consequences and the understanding and cooperation of parents and caregivers. Each of those things is a variable that will be documented, analyzed and interpreted in this analysis. They are discussed in the next "Study questions" section.

4.0 Study questions, school-wide for the pilot AIR/Rtl schools

In general, the West Virginia pilot schools have considerable experience with Rtl. But, the state also has lots of schools in lots of different circumstances. The practice of Rtl that underlies AIR should be documented, not assumed. That is especially the case as the state prepares to bring Rtl/AIR to other states that will have a wide variation of school characteristics at intake.

4.1 The Pilot schools and Rtl adoption stages. In section 4.2 below, we describe our plans for measuring the extent of implementation of the AIR initiative. But there is a prior question dealing with the developmental stage of Rtl adoption in each of the pilot schools. To quote the National Association of State Directors of Special Education, "The school building is the unit of change in Rtl." (NASDSE, 2008). Teachers work in grade-level teams and have their effect, *inter alia*, as students progress from teacher to teacher and from grade to grade. Is there a critical mass in the faculty supporting Rtl? Are teachers so pre-occupied with early stage Rtl adoption that they are unable to shift their language? Benchmarking each school's Rtl development will provide context information for the analysis of AIR and it will illuminate dissemination and adoption issues in the initiative's next stage.

4.2 Documenting each school's stage of Rtl - AIR program implementation

Interactive, Inc.'s on-going evaluation of the 19 schools in Virginia's Rtl pilot program is measuring, among other things the NASDSE's recommended stages of implementation: (1) awareness and consensus building; (2) infrastructure building especially with needs assessments to identify necessary changes in practice; and (3) implementation defined as creating new, stable and institutionalized practices and procedures (NASDSE, 2008).

We expect that the West Virginia demonstration schools will be in the second and third stages (see next table) but the point of any evaluation is not to assume, but to document. We will use the following framework to gather data about each school's developmental level⁴.

⁴ The NASDSE school building 'blueprint' has scores of recommendations about each component. They are helpful although they also assume more detailed attention to the blueprint than the press of other business is likely to allow for every school. Interactive, Inc. will use the blueprint as a guide to data collection

A Framework for Documenting the Rtl Context of Each WV AIR Demonstration School's Program Implementation	
Component	Score
(1) Consensus building development phase completed	
School leadership (administrator and teacher leaders)	
Professional development	
Awareness and acceptance of required labeling changes	
Parent and caregiver awareness and support	
(2) Infrastructure building development phase completed	
School leadership (administrator and teacher leaders)	
Needs assessment and business process re-engineering*	
Collaborative planning	
Professional development (ongoing)	
Universal screening (repeated as necessary)	
Technical assistance, e.g., data collection with hand-held PDA's and DIBELS, etc.	
School-county-RESA-state coordination	
(3) Rtl Model adoption implementation phase completed with fidelity and stability	
School leadership (administrator and teacher leaders)	
Professional development geared to teacher-identified needs	
Student progress monitoring at agreed intervals	
Student ongoing diagnosis and prescription (without disability labels)	
Tier I (a) instructional interventions and (b) behavior interventions*, evidence-based	
Tier II (a) instructional interventions and (b) behavior interventions, evidence-based	
Tier III (a) instructional interventions and (b) behavior interventions, evidence-based	
Special education (a) instructional interventions and (b) behavior interventions, evidence-based	
Intervention plans for all students of similar performance (or) individual intervention plans	
Group-based planning	
Prescribed instruction is continuous	
(4) Total Rtl Implementation score per school	

*For example, Positive Behavior Support.

There are three major reasons for this preliminary attention to the school context of the teachers' adoption of alternate identification and reporting methods. First, the school as a whole and the teachers within it can each veto the other's

but will modify it to reflect the particular interests of WVDE program leaders and the field experience with Rtl analysis in our other engagements.

progress. If it turns out that there are few if any instructional consequences of the AIR procedure in one or more schools that may have more to do with the climate of the school than with the willingness of the teachers. Second, as the WVDE moves this from the demonstration schools to others and from schools in West Virginia to schools nationally, it is certain that schools will vary greatly in their readiness to adopt AIR. Third, this preliminary analysis promotes fairness to teachers and subsequent large-scale dissemination.

In our experience, school-level project managers are good sources of data about the inevitable adjustments in programs. To capture that on a periodic basis, we propose to ask project managers to provide the following information during the school year.

AIR/Rtl Activity Tracker 2008-09

Background Information	
School name	
Project coordinator name	

School-Wide Goals Summarized (AIR and Rtl and other priorities)			
Student Achievement Goal	AIR/Rtl Goals	Teacher Training or Curriculum Development Goals	Other? Please list

AIR/Rtl Faculty Professional Development					
For each AIR professional development activity this year					
Date	Topic	Audience (grade level, etc.)	During school hours or not (y/n)	# of teachers attending	Other remarks

AIR/Rtl Faculty Professional Development (continued)						
Sources of PD				Site of PD		
WVDE	Faculty Peers	Central Office	Vendor	Individual Classroom	Small group	Whole faculty

AIR/Rtl Activity Tracker 2008-09 (continued)

All AIR pilot schools + selected Rtl non-AIR schools (Please assign a "letter grade" to each item ►)	A, B, C, D (insert one)
1. School leadership	
2. Teacher leadership	
3. Grade level leadership	
4. Universal screening completed	
5. Needs assessment about the school's AIR/Rtl organization needs completed	
6. Classroom-specific needs assessments completed	
7. Supporting changes from district identified	
8. Remaining problems to be solved identified	
9. Collaborative planning	
10. Organizational changes implemented (new schedules, new testing, new reporting)	
11. Student interim assessment technology for data collection available	
12. Analysis available to teachers about student interim assessments	
13. Tier 1 instructional interventions identified	
14. Tier 2 instructional interventions identified	
15. Tier 3 instructional interventions identified	
16. Teacher IEP eligibility participation	
17. Availability of corroborating data from multiple sources	
18. Tier 3 print curriculum changes	
19. Tier 3 instructional duration changes	
20. Tier 3 instructional intensity changes	
21. Tier 1 positive behavioral interventions identified	
22. Tier 2 positive behavioral interventions identified	
23. Tier 3 positive behavioral interventions identified	
24. Frequent student progress monitoring is ongoing	
25. Packages are prescribed and research-based	
26. Intervention plans for all students of similar performance	
27. Prescribed instruction is continuous	
28. Group-based planning and diagnosis	
29. Individual intervention plans	
30. Recursive processes for students as required	
31. Rtl Consensus building stage completed	
32. Rtl Infrastructure development stage completed	
33. Rtl Implementation stage completed	
34. AIR planning completed	

35. AIR school-wide implementation completed	
--	--

WVDE program managers may also find these data and conclusions to be helpful.

5.0 Study questions for teachers in the AIR pilot schools

5.1 Introduction. There are three over-arching study questions.

First, can “alternate identification” replace traditional, categorical labels?
(Will teachers do it?)

Second, will the alternate identification be associated with different practices? **(Will it make any difference in teaching?)**

And third, are school, classroom, student and family benefits associated with the fidelity of AIR program implementation? **(Will the teacher changes help the children?)**

Those questions and their underlying assumptions are graphically summarized below.

Does Language Change Predict Schooling Change? What associations are there between descriptive changes and...				
Assessment Change ►	Prescription Change ►	Instruction Change ►	Achievement and Behavior Change ►	Across the school, in the families and over time

5.2 Teacher language and assessment

Interactive, Inc. will begin this analysis by assuming that teachers want to forego conventional labels and that they want the absence of conventional labels to effect their teaching. Whether they do those things or not is an empirical question—understanding the variations in labeling is one task of this evaluation. The other is to describe those variations in ways that arm school people who seek to improve their AIR practices.

There is a possible dilemma in that high fidelity Rtl implementation may provide so much information that teachers may use more labels to summarize and categorize children. With more data and more frequent data, teachers may feel a need to summarize and describe that information. The understandable strain is to make sense, make meaning out of data. At least some teachers who feel themselves overburdened by the ordinary and daily demands of their classrooms (“all the children, all the time”) may revert to more familiar disability-based label. And some may be encouraged in that direction by a personal need to “explain” the low performance of some students.

The professional literature is clear that increased attention to periodic individual student information such as from progress monitoring increases student achievement. Progress is in increased attention to periodic information about the paths of individual students and the case for that is clear in the current professional literature. Rtl is a promising instance of a more general trend toward data-driven instruction and in particular interim or formative assessment. The ability of interim and formative assessment to power better student achievement is now well documented. Black and Wiliam (1998) found significant gains for all learners across school subjects. There were improvements for all ability levels, but especially for typically lower achieving groups (Black & Wiliam, 1998, 2002). Rodriguez compared the achievement of groups of otherwise similar students who did and did not have “embedded performance assessments”. “In classrooms with embedded performance assessment the mean change scores were 27 and 20 points for reading and math, respectively and are substantially greater than those of the comparison group which gained nothing in reading and 6 points in math” (Rodriguez, 2008).

5.3 Teacher language and prescription

In the Rtl cycle that begins with universal assessment and ends with targeted instructional and behavior interventions, the next step is prescription and that is particularly critical for AIR.

What do teachers do with the more granular data from AIR and from IEP's? Do they use it to change their lesson plans? To create new assignments for small groups? To change the way they present material? Do they change the material itself?

Marzano compares the gains to be expected over a 15-week period with no assessments---no gain---and 5 assessments---a 20 percentile point gain (Marzano, 2006). The contribution from formative (frequent) assessment is to enable teachers to adapt what they do to what students have learned and should learn next (Chappuis & Chappuis, 2007). The gains from what Marzano calls “the power law of learning” are not surprising; both teachers and parents have always wanted to tune instruction to particular learning needs and learning styles. And tailored, customized alternative learning pathways are critical to narrowing achievement gaps (Duffy & Kear, 2007). The questions for these pilot schools and teachers are, “What changes in prescription are related to the changes in assessment?” “What are they and are they different for students identified with and without labels?”

5.4 Teacher language and instruction

Getting the data and using the data are two different things and that distinction is very likely to apply to these labels as well. In an *Educational Leadership* article titled “The Rest of the Story”, Guskey (2006) has studied what teachers do with more precise information about students. Semantics guide practice but maybe not. It is possible that some teachers will learn to apply the new labels

(superficially) to what they've always done. Thus, language may or may not be connected to teaching.

The assessment experts, Black and William continue that, for improvement to follow better data there has to be a "...new way to enhance feedback between those taught and the teacher, ways that will require significant changes in classroom practice. ...For assessment to function formatively, the results have to be used to adjust teaching and learning..."

West Virginia has pursued teacher certification policies in the recent past to ensure that teachers have a range of teaching specialties that bracket the classroom-based needs of students in each tier (plus special education). The assumption is that as more finely grained assessment identifies needs (or successive and increasing needs for the same child), that child's teacher can select from an available, personal-professional market basket of techniques. For teachers in the conventional "common branches" tradition, that may be difficult. The state has, however, encouraged teachers to seek "multiple categorical certification". Most West Virginia teachers are, in fact, multiply certified---MI, LD and Behaviorally Disordered. It remains to be seen the extent to which they are able to deploy successively individualized and intensive instruction in the AIR schools. And we will document the practical issue of how successful schools are in matching student needs with teacher strengths without the previous labels?

We will also document any barriers teachers may describe. For example, do teachers believe that there are resource constraints (available time, loss of instructional time, available information management technology) on how they make use of AIR to change their instruction? Are there differences in AIR-linked teaching procedures by subject matter, ELA, ELL, Math, etc.?

Finally, in this section we will test the assumption that the conventional labels applied by the county for some purposes will never reach the teachers or the students. ("For federal reporting purposes, district-level staff will still assign categorical labels, but these labels will not be shared with school staff or parents.")

5.5 Teacher language and student achievement, student behavior and other student changes

Finally, we will analyze the extent to which (1) AIR language change is related to (2) changes in assessment, prescription and instruction and then to (2) changes in student achievement, behavior and other areas such as self-esteem. (This is a regression analysis described in 11.0 below).

6.0 Study questions for students

The following questions take the treatment/control form, "Compared to other similar students in schools not using AIR, do Tier III and/or IEP students taught in classes where teachers have used AIR procedures...

- move to instruction and behavior circumstances that are appropriate to their testing?
- Improve in achievement testing?
- Improve their behavior (fewer referrals, fewer suspensions)?
- Improve their attendance?
- Improve their self-esteem?
- Increase their co-curricular participation, e.g., teams, clubs, after-school activities?

7.0 Study questions for parents, caregivers and siblings

Some parents have played major roles in the litigious history of special education. For this analysis, we will focus on the role of parents as partners to the school and teacher and on "parents-as-educators".

The first study questions will document the extent to which parents report that they have modified their own use of labels from disability to behaviorally-appropriate. (This "language" question parallels the "language" question for teachers.)

Second, we will gather information about sibling language modification.

Third, we will gather information about parents' involvement in school and their child's classroom. We will archive numbers of contacts, telephone calls, face-to-face visits along with supportive participation in the classroom, for example, as 'class parent', etc.

Fourth, any place that parents require a disclosure of a district-level categorical label (using for example, the Freedom of Information Act), we will document that along with any possible additional consequences.

8.0 Study questions for state, regional and national adoption of AIR

8.1 Adoption and dissemination in West Virginia

Assuming that pupil, classroom and school results justify further consideration, the state's ability to move AIR to additional districts should be greatly facilitated by the aegis of the State Board and the WVDE. It will be more demanding to encourage adoption in upper grades schools, perhaps especially high schools. The success of this analysis should, however, illuminate all of the variables of school practice and wider policy as they apply to that work.

Beyond that, Interactive, Inc. is a 'gold standard' evaluator: our ability to document outcomes in a compelling and unambiguous fashion, in West Virginia, has already been demonstrated with, for example, presentations to the West Virginia State Board of education and to a joint session of the state legislature.

8.2 Adoption and dissemination regionally and nationally

The AIR initiative is another instance of the state's leadership although it is notoriously difficult to get other jurisdictions to credit gains for which they were not (locally) responsible. Interactive, Inc. is a national firm and a regular participant in national association meetings including for example, the Council of Chief State School Officers.

We will document and report the AIR demonstration in ways that maximize West Virginia's credibility and utility as a wide-scale, large-scale source of improvement in special education. And we will convene a review of the Year 1 final report with a panel of national experts to facilitate the state's consideration of regional and national dissemination strategies. (Note, this feature is an option that the state may or may not exercise. Additionally, the WVDE will approve any members and may nominate members to the group. See below, section 15.4)

8.3 Cost analysis.

This feature of Interactive, Inc.'s proposal is directly related to the dissemination and adoption issue. Special education can cost as much as \$70,000 per student (SEED, 2004 Special Education Expenditure Project) or more than ten times average pupil expenditures. One of the several benefits of Rtl in general is its putative ability to maximize student success and thus minimize referrals to special education. That should be even more in evidence with the addition of AIR which strives to make special education services more effective. We will pay special attention to documenting the school-level costs of "intervenors" and of special education teachers working at Tier III assignments. There are formidable difficulties in documenting any school expenditures even using full-cost assumptions and existing data. Nonetheless, the significance of the topic suggests that Interactive, Inc. should estimate these expenditures for the AIR and control schools and make some preliminary (Year 1) conclusions. (For an initial specification of our cost analysis, see below 11.0.)

9.0 Type of study, study conditions and sampling

9.1 Type and conditions. This is a mixed methods, quasi-experimental study with data collected pre and post from otherwise similar treatment (Rtl with AIR) and comparison (Rtl without AIR) schools⁵ (and) potentially over multiple

⁵ Although the RFP refers to "15 elementary schools in the first year", we strongly recommend the addition of a group of comparison or control schools beginning in the first year. Omitting those schools delays the time when WVDE can make

years. AIR schools are volunteers: the comparison schools will participate with the approval of their leadership. The units of analysis are (1) the classroom and teacher (2) within the school.

9.2 Sampling. The 15 treatment schools have approximately 400 classrooms where the instructional and other consequences of AIR might be studied (assuming that there are Tier III students in those classrooms): adding comparison classrooms yields a total of 600-650 possible classroom sites. We will conduct a population study of all 15 AIR treatment schools and eligible classrooms. For selection of comparison schools, we will seek the assistance of WVDE to identify otherwise similar schools who have implemented RtI but are not using AIR.

10.0 Data collection and management

Interactive, Inc. accepts the responsibility to match our data collection procedures to the particular needs of these students and to the complicated reality of the classrooms in which teachers are adding AIR and RtI to their existing obligations. Our data collection will be as respectful and as non-obtrusive as can be managed consistent with the requirement for valid and reliable metrics.

We will collect data about Tier III and IEP students' academic and other progress plus their attitudes and opinions. We will collect data to measure changes in identification and especially teaching and behavior support practices. And, at the school level, we will collect data about implementation fidelity for both the AIR program and the underlying RtI program.

10.1 Pupil progress monitoring

If the rate of learning is a variable (and that rate is critical to the prospective gains from AIR information) then one central feature will be the ability to follow students over the lifetime of this study. Said differently, program effects may be more pronounced in the second or third year than in the first⁶. There are several components to this. First, the WEVIS data already contain descriptive information about the children in the study including the committee-assigned previous disability labels, the child's placement, school and class. From the school, we will need each child's "local" alternate identification.

Then we will extract, transform and load classroom-specific information about the assigned Tier or other status (special education) and interim data on locally-defined intervals (these may be Palm DIBELS or other data). From that, we will

confident and unambiguous recommendations about the results and benefits of AIR.

⁶ And that may be especially true of the initially lower-adopting AIR schools where the work of familiarization and recruitment is as yet incomplete.

be able to map the child's trajectory among tiers and other placements including elapsed time per placement.

Those data will be coupled to teacher instructional and behavior intervention data per child (see below).

We note that the state is in the process of fielding benchmark, interim tests constructed from items that are similar to the WESTEST item pools. While that is intended to provide planning information in connection with the re-calibrated WESTEST at the end of 2009, those data can be useful for the AIR teachers and for this analysis.

10.2 Other pupil data collection

Labels have an effect on instruction and on learning: it is important to measure student responses to this new, more pro-child procedure. For data collected from young children, validity and reliability are often compromised by suggestibility, cued responses, and limited attention spans. Peer influences sometimes distort focus group responses. AIR-identified students will deserve additional consideration.

In other similar studies, Interactive, Inc. has used a combination of techniques including (1) casual-setting peer interviewers (subjects are interviewed by peers away from the classroom and using simple scripted protocols); (2) vignettes accompanied by picture responses; and (3) especially video-conferencing direct observation.

In the last technique, we would post the same brief filmed vignette on a central computer monitor: the student joins the session through web-ex video conferencing, takes over the cursor on our monitor and navigates the materials on the prepared site. The students wear headphones and a microphone so that we can hear their commentary as they experience the brief simulation. All students see the same materials (fixed-stimuli) but respond individually (open response). The non-threatening, impersonal computer setting often further facilitates responsiveness.

We may also extend our data collection through independent eye movement measures. Eye movement methodology collects data on the deployment of visual attention as individuals complete cognitive tasks or observe information displays. Unlike verbal recall protocols, which are vulnerable to user expectancy effects and poor recollection at the time of the recall prompt, eye movements are the actual traces of visual attention as the individual completes the task at hand. Eye movement studies have demonstrated that people from different cultural backgrounds attend to visual displays in a manner that yields reliable and predictable differences. Further, differences in individual levels of understanding of the displays being observed (expertise) results in reliable differences in eye movement. Given the utility of eye movements in describing group membership

and expertise, they can provide a corollary measure to the video vignettes. If the labeling effect is pronounced, we should get different allocation of visual attention on the same vignette based on manipulation of the label.

Those vignettes can include the same trigger words that we will use in face-to-face interviews with individual children. That is, we will use un-structured, free association prompts such as "resource room", "aide", and "extra help" to measure student's responses.

10.3 Teacher language in connection with AIR

AIR is ambitious in that it counsels teachers to adopt new ways to think about and talk about some of their students. For example, Chapter 6 of Policy 2419 promotes the language of inclusion rather than "grouping", "mainstreaming", "disabilities" and so on.

In this section, we describe how we will measure those changes and in the next section, we describe classroom-centered collection of related data. The first column of the table below shows the desired language, the second column shows the previous (and proscribed) language and the third column shows other commonly used labels.

Comparing Student Descriptors		
AIR Desired descriptors	Previous disability labels	Other commonly used labels
WV CSO standards descriptors: (1) Novice (2) Partial mastery (3) Mastery (4) Above mastery. And elapsed time to mastery in the CSO standards descriptors	Learning disabled Mentally impaired Emotional/Behavioral disorder Orthopedically impaired Other health impaired	Letter grades: A, B, C, D, F Report card categories ("needs improvement", etc.) AYP school categories AYP-identified populations Code words e.g., "Bluebirds" Remedial Compensatory Disadvantaged FARM-eligible T1-eligible Ability grouping Tracks, paths Pace of learning (slow, etc.) Content level

Teacher discourse is one indicator of AIR progress although capturing that discourse is a challenge⁷. We will collect, analyze and interpret three triangulated levels of data---web survey, artifactual and telecommunications.

10.3.1 Web survey self report

This is a pre- post survey population survey of all teachers in the AIR and comparison schools. [See Appendix I for a draft of the survey.] Please note that the web survey includes fact-level questions (there will be 'right' and 'wrong' answers) and self-report, forced-choice paired statements. Both techniques go beyond the usual "smile check" Likert response data.

This study will be fielded in the middle of the academic year. In order to capture "baseline" data as early as possible, we have included in this proposal a draft of the instrument which we look forward to refining with the WVDE. That (and our extensive related web-survey experience with the WVDE and West Virginia schools) should speed the collection of baseline data.

10.3.2 Artifact review

We will use on-site field data collection to document:

- Grade books
- Wall displays of student work
- Desk drawer and file drawer artifacts.

10.3.3 Telecommunications data collection

- Depending on likely teacher cooperation, we may create a closed Internet social network limited to teachers in the 15 schools.
- We will use speaker phones to capture grade level discussions, faculty meetings and other related discourse
- We may parallel the use of video-audio conferencing with students so that each teacher is presented with similar data sets of student performance and asked to comment in process as they scan data. We will then content analyze session transcripts.

10.4 Teacher classroom practice

Both our classroom observations and our key interviews will be protocol-driven to maximize the validity and reliability of the data. Classrooms will be observed using an item checklist designed to record general and specific AIR elements in the classroom. [See Appendix V for an early draft.] Similarly we will prepare interview guides to support and regularize the collection of those data. All classroom observations will be "double-blind", that is, field data collectors will not know where either the school or any teacher scored on the pre data collection analysis of Rtl and AIR implementation.

⁷ Interactive, Inc. will participate in and comply with any IRB Human Subjects review that may be appropriate although, in our experience, studies of the type we propose are exempt.

Principals will be asked to schedule our classroom visits during regular instruction but not, otherwise to make any special arrangements. We will use a "10 X 10" observation technique, i.e., we will look for and record ten specific AIR elements in brief, ten minute visits. That maximizes the number of classrooms we can sample and minimizes interruption to instruction.

We will pay special attention to related assistance, for example Positive Behavior Support.

Additionally, we will record the physical, environmental organization of each classroom for each visit with special attention to the location of AIR-eligible children and to their inclusion in instruction and other activities.

Ten-minute observation intervals will allow us to visit approximately 25 classrooms in one school day. Every classroom in each school will be visited every six weeks (more frequently during Year 1), for a total of five visits per classroom/per school/per year.

10.5 School-level fidelity of AIR-Rtl implementation

Since the discovery of the implementation problem (sometimes called "street level bureaucracy") in the 1970's [Mann (1976)], the mismatch between superordinate mandates, requirements or suggestions and subordinate responses has vexed education policy makers and school service deliverers. The autonomy of LEAs, the quasi-independent professional responsibility of teachers and the logistic impossibility of monitoring every classroom all the time--all have the effect of making schools and classrooms the final arbiters of policy. Or, aphoristically, "Practice makes policy".

Desimone and O'Donnell bring the analytic procedures for measuring implementation up to date (at least through the comprehensive school reform movement of the 90's) although the practical reality of relatively un-impacted schooling has remained the same regardless of successive waves of highly recommended programs. For example, there are 3500 schools in the most drastic "restructuring" phase of failing to make *Adequate Yearly Progress* (Scott, 2008) although a General Accounting Office study shows that 40% of those schools have done nothing in response (Tomsho, 2008)!

The pivotal question for this analysis, and for the WVDE (and for regional and national dissemination) is---"How much AIR implementation is enough?"

We strongly recommend that the Department treat the answers to that question as an empirical event. "Enough" should be defined in terms of the student, teacher and school results that can be empirically documented and related to AIR program inputs. For example, is it reasonable to expect that instructional practices resulting from alternative identification averaged across the 15 pilot

schools will (1) increase the Reading gain scores of AIR-eligible students by some fraction? (2) Decrease referrals to Tier III assistance by some fraction? (3) Increase the amount and specificity of Tier 3 specially designed instruction for boys more than one grade level behind by some fraction?

Interactive, Inc.'s methodology is designed to address those questions and, collaboratively, to refine the program goals and expectations with the WVDE.

In general, we expect that Desimone's framework will have some explanatory utility. For "specificity", we are aware of the Department's extensive guidance to schools. But it remains to be determined how aware districts and especially schools are about that and how much of it their teachers use to change their instruction and other classroom routines (an empirical question). The "consistency" question raises issues of policy clash with teacher agreements, school routines, local budget limitations and a host of other variables. And regime stability, leadership and followership continuity are also putatively important variables.

Earlier in the proposal, we outlined the defining features of AIR as they should be and may be implemented in schools. Each of those program characteristics as measured by our multiple and over-lapping data collection procedures will allow us to determine aspects of O'Donnell's schema---adherence, duration, participant (teacher, administrator) responsiveness and differentiation or marginal utility.

In summary, we assume that program adoption is a function of forces described by the WVDE's interest in AIR program implementation. Pedagogy counts but so does the inertia of prior practice, the press of other commitments, the inevitability of legitimate disagreements. Our study questions, data collection, analytic and reporting plans when supplemented with continuing dialogue with the WVDE and other stakeholders should yield valid and reliable information about AIR-Rtl pilot implementation and future progress.

11.0 Statistical analysis and interpretation

The major dimensions of this analysis are: (1) AIR schools by Rtl implementation stage and fidelity, (2) AIR schools by amount of teacher implementation of classroom instruction and behavior support consequent on their AIR descriptive practices both compared to non-AIR schools; and (3) changes in results for the students, teachers and schools (over potentially two or three years) plus (4) monetized estimates of costs forgone and productivity gained as a result of AIR.

Interactive Inc.'s analysis and interpretation of the data will apply statistics, including analysis of the variance (ANOVA) and regression analysis, appropriate to sample sizes. Assuming there are significant differences between treatment and control groups (and among program variables) we will compute effect sizes.

Difference in school and class outcomes will be examined using three approaches:

- General linear models (e.g., ANOVA and/or regression)
- Post hoc independent and dependent sample t-tests will be calculated to test the null hypothesis of no difference between conditions, between groups or over time and
- Regression analysis will be used to examine relationships among biosocial characteristics and other variables.

We will search for intervening variables using correlations, independent t-tests, and/or non-parametric analyses to determine the relationship between possible moderators and primary and secondary outcome variables. Variables that are found to be significantly related to an outcome will be tested as a moderator variable in ANOVA analyses as described above. A significant interaction term will suggest moderation, and t-test will be conducted to determine the nature of the interaction.

West Virginia and its schools may reap two kinds of benefits from the success of AIR. First, it may avoid downstream instructional and other costs (costs foregone) and second, it may get greater productivity from participating teachers. Our return on investment analysis will assign monetary values to the teaching-related cost savings and productivity gains for (1) the (average) AIR school and (2) the (average) non-AIR school. Assuming that there are greater dollar savings and productivity gains for the AIR schools, we will subtract their associated monetary values from those of the non-participants to get a net gain from program participation. That amount will then be divided by the annual cost to provide the AIR to the average school with the result being the State's return on the AIR investment. For example:

$$\begin{aligned} & \sum [\sum(a) (b) (c)...(r)] \div n = \text{average \$ value for AIR schools} \\ & - \sum [\sum(a) (b) (c)...(r)] \div n = \text{average \$ value for non-AIR schools} \\ & = \text{Savings \& productivity gains for AIR} \end{aligned}$$

$$[\text{AIR advantage (savings and productivity gains)}] - [\text{Annual cost of AIR}] = \text{ROI for West Virginia's AIR program}$$

12.0 Phases of research and duration of study

12.1 Phases

Phase 1: *Collaborative planning and criteria setting*. Statewide projects are complicated and dynamic. This one will likely have experienced changes between the publication of the RFQ and the initiation of the study. Those changes should be reflected in the study design. It is also critical to agree on reasonable expectations for outcomes at the beginning. That treats schools fairly and helps calibrate goals and future support. For example, what proportion of eligible children can be expected to migrate from Tier III to IEPs and special education over an academic year? 30%? 50%? How will that vary by student

descriptor? And, what proportion of regular classroom teachers will still be using disability-based labels at the end of the first year? 10%? 30%? Interactive, Inc. will work with the WVDE to establish those criteria early on.

The collaborative design phase also includes a final review of all instrumentation--web survey draft language, interview and observation protocols, etc.

Criterion-setting and collaborative design will relate directly to the ability of the state to make the case for evidence-based adoption of AIR in other jurisdictions.

Phase 2: *Longitudinal design.* WVDE should expect that the first year of this analysis is correctly designed to support longitudinal, year-over-year data collection and analysis. Although the current scope of work proposed here documents a single year (and ends August 31, 2009), it is designed to give the state a systematic base to measure AIR changes over time.

Phase 3: *Web survey population baseline study of all teachers in AIR and not-AIR schools.* This provides a benchmark for future growth and should be completed as quickly as possible to capture early AY circumstances.

Phase 4: *Selection of outlier study schools.* WVDE program leaders will have particular knowledge of individual AIR schools and others. That knowledge should be reflected along with quantitative data in the selection of the final group of schools to be studied.

Phase 5: *Field data collection training of in-state employees.* We will use 95% alpha agreement levels to establish inter-rater reliability among our field staff. Field data collection will be check-coded by random exception and, if desired, we will include state program leaders in the classroom observation training.

Phase 6: *Field data collection.* (See below)

Phase 7: *Quantitative/Qualitative data ETL and reduction.*

Phase 8: *Draft analysis and interpretation.*

Phase 9: *Circulate first year report in draft for comments and corrections.*

Phase 10. *Year One final public and technical reports*

12.2 Duration of study and year one activity schedule

From the point of the contract award through to August 31, 2009.

AIR Pilot R&E Activity			
Schedule by Month, Deliverables and Partner Responsibilities			
Month	Deliverables	Comments	Responsibility
December 2008			
	Notice of intent to award contract	Interactive, Inc. will begin work at this point.	WVDE
	Logistic support for study launch	Roster of key school contacts for data collection, program description, logistics, etc.	WVDE
	15 AIR school descriptive material (proposals, preliminary reports, etc.) forwarded to Interactive, Inc.	Interactive, Inc. produces summaries for each school's AIR proposed activities	WVDE/ Interactive, Inc.
	Proposals analyzed, summarized and returned to AIR schools for comments	This creates planned AIR activities as a baseline for program changes, if any.	Interactive and schools
	Revisions to early drafts of web survey questionnaires for teachers, administrators, students, parents and siblings	To start baseline data collection in a timely fashion, we have already drafted versions for review and approval	Interactive, Inc.
	1 st AIR management team Charleston meeting to initiate study	Logistics, review of expected criteria, revisions to methods	WVDE/ Interactive, Inc.
	Phone call introductions to school principals. Follow-up paper letter. Scheduling initial school visits	This is fundamental to year-long cooperation.	Interactive, Inc./ grantee schools
	f2f revisions to data collection procedures and questionnaire drafts	WV on-site collaborative review of items to increase relevance and efficiency.	Interactive, Inc./WVDE/ AIR schools
	Revised drafts forwarded to WVDE for web hosting		Interactive/ WVDE
	1 st Round of visits to schools (Approx. 600 Classroom Observations)	24 school visits (WVDE participation is invited but optional)	Interactive, Inc.
January 2009			
	Pre-surveys posted	Cover letters, directions (Interactive drafts)	WVDE/ Interactive, Inc.
	Non-response bias check on pre-survey completion rate reviewed; follow-up as necessary including paper instruments		Interactive/ WVDE
	Analysis of pre-data from multiple respondents	Program baselines, frequency analysis of teacher, administrator and student, QL Round 1 visits	Interactive, Inc.

	2 nd round of school visits (Approx. 600 classroom observations), teacher interviews, student interviews, unobtrusive data collection (speaker phone, etc.), parent interviews	24 school visits	Interactive, Inc.
February 2009			
	3 rd round of school visits (Approx. 600 classroom observations), teacher interviews, student interviews, unobtrusive data collection (speaker phone, etc.), parent interviews	24 school visits	Interactive, Inc.
March 2009			
	2 nd AIR Management Team Charleston meeting	Review study and (at the option of the WVDE, meet with and brief AIR schools)	WVDE/ Interactive, Inc.
	4 th round of school visits (Approx. 600 classroom observations)	24 school visits	Interactive, Inc.
April 2009			
	Final round of school visits (Approx. 600 classroom observations) + Interviews and observations from all respondents including parents	24 school visits	Interactive, Inc.
May 2009			
	3 rd AIR management team Charleston meeting	Review study procedures and preliminary impressions, coordinate logistics	Interactive, Inc. / WVDE
	Post the teacher, administrator, student, parent and sibling EOY web surveys		Interactive, Inc./WVDE
	EOY survey completion rate reviewed: follow-up encouragement		WVDE/ Interactive, Inc.
	Close web survey data collection and forward data to Interactive, Inc.		WVDE
	QN data ETL	This includes analysis of student trajectories among RtI Tiers and/or special education	Interactive, Inc.
	Qualitative data input	Data reduction from visits and data entry: content analysis and constant comparative methods	Interactive, Inc.
June 2009			
	WESTEST administration dates in schools	(This affects availability of test data for analysis)	WVDE

	Begin analysis of AIR program	Teachers, students, administrators, parents and siblings quantitative and qualitative data	Interactive, Inc.
July 2009			
	Merge and analyze program implementation and test data, QN & QL		Interactive, Inc.
	Tentative findings, conclusions and interpretation		Interactive, Inc.
	Send discussion draft reports to WVDE	Discussion drafts	Interactive, Inc.
August 2009			
	Comments from WVDE		WVDE
	4 th AIR management team Charleston meeting to present revised final public and technical report	WVDE forwards summary report to USDE	Interactive, Inc. WVDE
	Revisions to methods for Year 2: Year 2 R&E implementation planning	(Assumes WVDE selection decision)	Interactive, Inc. and WVDE

13.0 Logistics plan: R&E management task distribution by participants

Interactive, Inc.	
Design study	
Data ETL	
Field data collection as agreed	
Analyze and interpret data	
Draft and circulate report for comments	
Revise and submit final technical and public reports	
West Virginia Department of Education	
Recruit all study participants	
Encourage school, teacher and parent participation	
Review, comment on and approve study methods	
Forward WESTEST and other achievement data	
Host web-surveys	
Forward all data to Interactive, Inc. in SPSS or Excel form	
Support this analysis with payment as agreed	

14.0 Expected Outcomes

Program officials in the WVDE know what they expect from the AIR initiative. Interactive, Inc. knows what kinds of data can be collected and brought to bear on which questions of practice and policy. The Department knows programs: Interactive, Inc. knows research and evaluation. Together, we know how to

make a compelling and evidence-based case to move this initiative to national consideration.

Interactive, Inc. is committed to helping the Department make this a national model. One part of that is to consider (and refine) a list of expected outcomes. Please note: the following statements are hypothetical: they all depend on empirical inquiry. Nonetheless, these conjectural conclusions can be used to orient key audiences to the outcomes and uses of this analysis.

- AIR is most closely associated with minimizing student movement to IEP's and special education when at least 60% of an elementary school faculty change their instructional and behavioral support language to reflect AIR recommended descriptors.
- AIR is best sustained in schools where the overall school fidelity of RtI implementation score is 70% or above.
- Students in the previous categories of ED/BD and health or orthopedic impairment were helped the most by AIR.
- There were no statistically significant differences among results by other student bio-social descriptors, i.e., AIR was equally able to help children from different racial, ethnic, family income and language of origin backgrounds.
- Teachers who are high fidelity users of AIR procedures also change their labeling practice for students in the general education population
- Every dollar invested in AIR, returns \$2.14 to the state in subsequent instructional and behavior management costs avoided and in productivity gains realized.
- Total returns on investment over three years are projected to be \$77,400 (the average costs avoided/productivity gained for an average school).
- AIR did not impede, delay or otherwise negatively effect the provision of special support services
- Teacher ability to reflect the consequences of AIR in their classroom instruction would be eased to the extent that the WVDE can integrate RtI SIS support with the general-use LMS and IEP-reporting systems in counties.
- West Virginia's AIR initiative is an evidence-based program that can be launched at scale, in the state, region and country.

15.0 Reporting

15.0 Types of reports

In connection with project management we will prepare (1) monthly, non analytic progress reports; (2) final reports in draft for comments and corrections and (3) final public and technical year-end reports. The public reports will be written for specialist and interested policy audiences, e.g., state legislators and board members.

Note Bene: If the WVDE has reporting requirements from the US Department of Education in connection with this pilot program, Interactive, Inc. will prepare its materials so that they are directly useful for state reporting to the federal government. We have extensive experience with supporting the WVDE (and the New York State Education Department) in project reporting to the federal government⁸.

15.2 Regional and national dissemination activities

Interactive, Inc. will support the WVDE Office of Special Programs in the following ways:

- Panel, workshop and other format proposals for national professional meetings prepared on behalf of WVDE staff
- PowerPoints, scripted talking points and brief training to support lead teachers from AIR schools in making presentations about their use of AIR
- PowerPoints to support WVDE staff presentation of findings
- AIR-RTI project measurement packages including item banks available for adoption by other jurisdictions in the state, regionally and nationally. Because the (quantitative) web-surveys will have been validated by the subsequent double-blind (qualitative) field data collection, the state will have an inexpensive and valid measure of AIR for future use in selecting schools, targeting professional development and disseminating results.

15.3. Schedule of reports

- Monthly non-analytic progress reports
- Quarterly progress reports in connection with Charleston review meetings.
- July 2009 draft Year 1 final reports circulated
- August 2009 final technical and public reports

15.4 Advisory panel on national dissemination

Interactive, Inc. will provide for the first year's final report to be reviewed by a panel of national experts. The experts will be tasked to comment on the requirements that other jurisdictions would have for adopting the West Virginia AIR model. (They will not be asked to comment on matters specific to West Virginia. For example, if the pilot experience is affected by state certification requirements or budget cuts, that would be outside the purview of the panel.)

We propose a panel with six members. Each member will be subject to approval by the WVDE: we further propose that the Department should appoint half the

⁸ C.f., Mann, D. and J. Becker, (2007) "THE RESULTS OF PROFESSIONAL DEVELOPMENT ABOUT TECHNOLOGY: A Report of West Virginia's Statewide Technology Model Schools Program 2005-2007" prepared for West Virginia Department of Education, Division of Curriculum & Instruction, Office of Technology and Information Systems with a grant awarded to the WVDE from the US Department of Education, PR Award # S318A040014, the Evaluating State Educational Technology Program (ESTEP).

members. Interactive, Inc. has working relationships with the following individuals. We list them as examples of candidates who might be recruited (no individual has been contacted in this regard).

- Thomas C. Boysen, former Kentucky state superintendent
- Wilmer C. Cody, former Louisiana state superintendent and NAEP ambassador
- Doug Cox, assistant superintendent for special education, Virginia Department of Education
- Tom Jenkins, Ph.D., Director, Educational Consultation Services, Wilmington, NC (nationally recognized Rtl trainer)
- William G. Librera, former New Jersey state superintendent
- Robert H. Pasternack, Ph.D., former assistant secretary, Office of Special Education Programs, US Department of Education
- Waldemar Rojas, former director of special education, New York City department of education
- Ed Shafer, Ph.D., Director, Pathfinder Village and former superintendent, Madison-Oneida BOCES, New York
- Joe Simpson, deputy Wyoming state superintendent and deputy director, Council of Chief State School Officers

In Interactive, Inc.'s experiences with those leaders, each can be helpful to West Virginia in identifying jurisdictions that would like to adopt AIR and in specifying the conditions and decision criteria that they would require. We recommend that the group be convened electronically. Alternatively, Interactive, Inc. would interview the members individually or in small groups.

WVDE would receive potentially helpful counsel and some members of the group would become the state's advocates introducing AIR to promising circumstances and connecting AIR to unexpected resources.

15.5 Sample reports from Interactive, Inc.'s previous clients

Depending on the scope of work, Interactive, Inc.'s technical reports often run to hundreds of pages. Rather than burden the reviewer with that volume, in this section, we refer to summary material from a sample of our recent large scale data analyses.

1. The Longitudinal analysis of the WVDE's "Technology Model Schools" Program funded from the US Department of Education. The summary page (below) has been used to brief state and national policy audiences.

The ESTEP TMS Findings and Their Implications for 2007-08 R&E		
Questions from the 2-Year Study of TMS	Findings from 2004-06	Implications for TMS 2007-08
Did professional development about	Yes, in Reading/Language Arts and in Mathematics for 4 th	The effect sizes should be strengthened for all

technology improve test scores?	and 5 th graders.	subjects, all grades.
Did professional development about technology contribute to closing the achievement gap?	In Math, Title I-eligible students in versions of the TMS program outperformed others. In Reading, Title I-eligible students did as well as others.	(1) Math results were stronger than Reading and (2) effects need to be extended to students from all backgrounds.
Did professional development increase the use of technology in classrooms?	Yes, as a result of the TMS model, trained teachers used technology 22% of the classroom day compared to 1% for untrained teachers. And, TMS students used computers twice as much as students without the program's support.	This is a strength of the TMS program and needs to be maintained. Some functional areas, e.g., interim assessment and school-home communication need to be strengthened.
How much professional development was necessary?	Assistance across at least one academic year.	Same, although additional gains may need additional means.
How should it be delivered?	In schools, in classrooms, on demand.	Same (although not all grantees will do this).
Who should deliver it?	Classroom teachers with special training to work with their adult colleagues.	Components of the TMS model should continue to be studied.
How much and for what did the trained teachers ask students to use computers in the classroom?	One-fifth (21%) of the school day and that use is targeted on Reading/Language Arts.	Student technology literacy, Social Studies and Science can be strengthened.
How much did the technology-trained teachers use computers?	One-fifth (22%) of the school day including intensive use of productivity applications.	The figure is an average: low-users need to be encouraged.
Are there other benefits for teachers?	TMS teachers used their own computers more, more expertly and for more productivity applications than others.	Another strength of the program that should be maintained.

Source: Mann, D. and J. Becker, (2007) "THE RESULTS OF PROFESSIONAL DEVELOPMENT ABOUT TECHNOLOGY: A Report of West Virginia's Statewide Technology Model Schools Program 2005-2007" prepared for West Virginia Department of Education, Division of Curriculum & Instruction, Office of Technology and Information Systems with a grant awarded to the WVDE from the US Department of Education, PR Award # S318A040014, the Evaluating State Educational Technology Program (ESTEP).

2. "The West Virginia Story: Achievement Gains from a Statewide Comprehensive Instructional Technology Program, Dale Mann, et al., (1999),

Santa Monica, Milken Family Foundation, see <http://web.mff.org/pubform.taf> for a PDF version of the final report.

3. Multi-site longitudinal analysis of the student, teacher, school and parent effects of one-to-one computing. Henrico County Public Schools, Virginia and Dell Computers, Inc.

The executive summary of Year 2 of that study follows:

**Documenting Outcomes from Henrico County Public School's
Laptop Computing Initiative: 2005-06 through 2007-08
Report of 2006 Baseline Data**



EXECUTIVE SUMMARY

In Henrico County Public Schools, high school students have access to one-to-one technology 24/7 through county-issued laptop computers. In order to investigate the impact of this initiative on teaching, learning, and student achievement outcomes, a three-year longitudinal study was initiated during the 2005-06 school year to study effective instructional practices across content areas. All high school students, teachers, and administrators were given an opportunity to participate in this phase of the study through a comprehensive, online survey. A sample of students and teachers participated in random-interval web-surveys. Additionally, classroom observations, interviews, and focus groups were held to gather more in depth information on technology use. The results presented in this report are baseline data for the three-year study.

Student test scores and laptop use. Data reported by students suggest that more use is associated with more achievement. However, the size of the relationship between components of laptop use and achievement is not large; only a few percentage points of test performance is explained. Just as laptop use is only one of many influences on learning, the ubiquitous computing initiative is only part of more comprehensive HCPS improvement strategy. Over time, the strength of the relationships and the number of curriculum areas benefited can be explored in depth.

When student attitudes and computer uses are compared to test scores in individual curriculum areas, there are 22 positive and statistically significant relationships. Of the 22 positive relations between achievement and laptops, 17 describe laptop use that is specific to a curriculum area or to general school use.

Biology and all versions of History are the curriculum topics where students report the most positive attitudes about laptop use and where there are associated test score increases. That is, the students who have more positive attitudes are also more likely to have higher test scores. Teachers in those areas are integrating technology into their classroom instruction, students notice that, approve of it, and those changes are linked to achievement. There are statistically significant relationships between test scores in

the sciences (Biology, Earth Science and Chemistry) and students' beliefs that the laptops help them "study", "take notes", "prepare presentations" and "organize information".

Virtually all of the district's students bring the laptops to school every day and at any moment, 38% are using their laptops. Students report that, because of laptops, they are learning more and that they are more likely to do high quality work with a sense of personal responsibility. They also predict that their laptop experiences in Henrico high schools will help them once they graduate.

There are 13 areas in which student reports of more use of computers were negatively related to achievement. Algebra accounted for 4 of the 13 areas. Early in this study, Algebra teachers had said that they wanted "to see student work" and warned about the incompatibility between alphabetic keyboards and mathematical symbols.

Teachers. Students report that their teachers have changed—they lecture less, they do more technology-enhanced presentations and they assign more projects and more group work. At any time in the school day, 42% of HCPS teachers are using their laptops. Teachers believe that their laptops and Internet connections are reliable. They ascribe improvements in faculty morale to the laptop initiative and they would like more professional development. Teachers believe that laptops can help bilingual students, visual learners and other students in need of special attention.

Administrators. Administrators use their laptops for communications, scheduling, budget and personnel matters. They believe that the laptops have encouraged the faculty to find new ways to teach and they also assign several positive outcomes to the 1-to-1 initiative including students' desire to learn and interest in class.

Potential Problems. No group reports troubleshooting problems, acceptable use problems or unrealistic expectations from students. The Dell machines are thought to be reliable and to minimize special training.

Recommendations. Our recommendations are intended to extend HCPS's already considerable success. Previous large-scale evaluations of educational technology initiatives stress the critical role of programs that are comprehensive (everyone is included), ambitious (all functions are supported) and sustained (there is political and administrative support year-over-year). Henrico's accomplishments reinforce that counsel for other jurisdictions considering ubiquitous computing. We recommend

- Strengthening the experience of the high-use, high-success areas into other curriculum areas
- Sharing teacher best-practices
- Increasing the use of interim, formative student assessment data
- Strengthening school-home-school digital communications and
- Increasing 21st Century and community-based project work.

16.0 Budget estimate

This is a fixed fee proposal that includes all deliverables, all work costs including travel, for a total of **\$144,000.**

17.0 Key personnel and Interactive, Inc. program evaluation capability

17.1 Key personnel.

Interactive, Inc.'s leadership for this project combines extensive national experience with scientific program evaluation and leadership in special education. The project support staff is experienced with facilitating mixed methods, longitudinal and large-scale research and we have recruited a group of experienced West Virginia educators as program associates and field staff.

(1) Dale Mann, co-principal investigator. Dr. Mann is the co-principal investigator of the Virginia Rtl pilot school longitudinal evaluation. He has managed 200 education program evaluations and directed the field analysis team that first documented the implementation problem in school adoption of external innovations (the Rand Corporation's *Change Agent* study series).

Dale Mann is Professor Emeritus at Columbia University (Teachers College and the School for International & Public Affairs) and Managing Director of Interactive, Inc. Mr. Mann chaired the Department of Educational Administration for 10 years. Dr. Mann has been involved with school improvement since the 1960's when his Washington service included responsibility as Special Analyst for Education in the Executive Office of President Lyndon Johnson and work implementing the Elementary and Secondary Education Act. Dr. Mann is the author of books and articles on school reform including *Policy Decision Making in Education* and, *Making Change Happen?* He is the founding chair of the International Congress for School Effectiveness, an organization with members from 66 countries focused on improving schools for the most needy children. With the Soros Foundations and the World Bank, he created networks of administrators to reform the national school systems of Russia, Ukraine, Kazakhstan, Kyrgyzstan, Latvia, Lithuania and Estonia and has worked in 20+ countries.

(2) Frederick Brigham, co-principal investigator:

Dr. Brigham is an Associate Professor of Special Education at George Mason University's College of Education and Human Development and Graduate School of Education. He previously served as Assistant Professor of Special Education at Valparaiso University, where he was Coordinator of graduate studies in education, and at Bowling Green State University. He also served as Assistant Professor and Associate Professor of Special Education at the University of Virginia's Curry School Education.

Dr. Brigham was elected president of the Council for Exceptional Children Division for Research in July 2007 and was appointed twice as editor of *Behavioral Disorders*.

For Virginia, Dr. Brigham chaired the state special education advisory committee during the last federal review of the state's special education programs. He was also director of special education for a large multi-district cooperative in North Dakota when it was reviewed by the state and federal agencies.

(3) Elizabeth C. Scott, Principal Field Consultant

Until recently, Ms. Scott served as Assistant Director, Office of Assessment and Accountability in the Division of Curriculum and Instructional Services for the WV Department of Education. She is broadly experienced with special education monitoring, IDEA and West Virginia Board Policy 2419 (*Regulations for the Education of Students with Exceptionalities*) implementation, and with technical assistance to districts about regulatory compliance and performance. She also worked with the Office of Special Programs and the West Virginia Education Information System (WEVIS) to develop an online IEP.

Ms. Scott will be responsible for field relations, liaison, and consulting assistance on site for this project.

(4) Susy Calvert, M.A., Field Data Specialist Ms. Calvert is retired from the West Virginia Department of Education as a statewide instructional technology coordinator. In that capacity, she was responsible for coordinating various instructional technology projects in counties and schools, collecting and analyzing data and progress monitoring. Ms. Calvert is widely known and respected among the state's educators. She has been: (1) a coordinator of gifted programs for Raleigh County; (2) a professional developer; (3) an elementary teacher with certification in Spanish; and (4) a master mentor teacher.

(5) Charol Shakeshaft, project methodologist and statistician

Dr. Shakeshaft chairs the Department of Education Leadership at Virginia Commonwealth University where she is also a professor. Her Ph.D., is in research methods and statistics and she has post-doctoral training at the University of Michigan's Survey Research Center. An expert in large scale data analysis, she is also a national and international leader on issues of effective schooling for underserved populations, especially gender and racial minorities. Among her many awards, she will receive the Effie H. Jones Humanitarian Award for Leadership at the 2009 annual meetings of the American Association for School Administrators.

(6) Kristy Tinsley, Project Manager

Ms. Tinsley is a research analyst and project manager with Interactive, Inc. She has statistical and program analysis responsibilities. Ms. Tinsley graduated with

and Bachelor of Arts in Psychology from Christopher Newport University and a Master of Science in Experimental Psychology from the University of Memphis.

(7) Karen Scherling, Program Associate

Ms. Scherling was a School Social Worker with Henrico County Public Schools in Richmond, Virginia for 25 years. She holds a B.A. from Davis & Elkins College and an M.S.W. from Ohio State University. Ms. Scherling has 27 years experience teaching in the college setting, and also has experience as an elementary school teacher. She has developed and led several workshops and seminars for parents, students and teachers.

17.2 Interactive, Inc. evaluation capability

Interactive, Inc. is a Virginia-based small business recognized by the US Department of Education's Institute of Education Sciences as a "gold standard" program evaluation firm and is listed on the Department's *Registry of Outcomes Evaluators*. We have conducted 200 program evaluations for schools, districts, state agencies, foundations, private firms and national ministries of education in ways that combine (1) empirical and evidence-based analysis with (2) an emphasis on practical recommendations for school improvement. Examples of our recent large-scale mixed methods R&E projects follow.

Summary of Interactive, Inc.'s Related Statewide, Mixed Methods Research & Evaluation Experience	
(1) Virginia State Department of Education 2-year evaluation of Response-to-Intervention pilot schools	
Agency: Virginia Department of Education	Dates: 2008-2010 \$135,000 per year
Client: Douglas Cox, Assistant Commissioner for Special Education , 804 225 3252, doug.cox@doe.va.us	
Quantitative and qualitative analysis of school, teacher and student outcomes associated with a statewide pilot "response-to-intervention" program	
(2) ESTEP Evaluation of West Virginia's Technology Model Schools Program	
Agency: WVDE & US Dept of Education	Dates: 2004-07 Amount: \$450,000 per year
Client: Brenda Williams, Executive Director, brendaw@access.k12.wv.us , (304)957-9833 (ext. 53331)	
Comment: Three-year federally funded statewide analysis of relation between technology training and student achievement	
(3) Alabama Statewide Interim Assessment Initiative	
Agency: STI, Inc. & Alabama SDE	Dates: 2006-07 \$100,000
Client: Rob Fiance, President and CEO, STI, Inc. and Edu2000. 818 516 2178, rafiance@aol.com	

Quantitative/qualitative analysis of 44 schools statewide in Alabama relating teacher use of assessments with Alabama high stakes tests and AYP status	
(4) New York 'Super-Evaluation' of NCLB Title IID Projects Statewide	
Agency: New York State Education Dept	Dates: 2006-08 Amount: \$130,000 average per year
Client: Teh-yuan Wan, Director of Technology, twan@mail.nysed.gov , (518)486-1547	
Comment: 25-site, multi-year, multi-method statewide analysis of the relation between educational technology implementation and NYS Learning Standards	
(5) Pennsylvania Students Achieving Standards	
Agency: Commonwealth Department of Education	Dates: 2000-03 Amount: \$145,000 per year
Client: Michael Golden (then) Deputy Secretary of Education, currently VP, Microsoft Education, michael.golden@microsoft.com , (212)641-6146	
Comment: Multi-year, statewide analysis of relation between education technology and achievement as measured by Pennsylvania standards	
(6) Henrico County, Virginia High School 1-to-1 Computing and VDoE 'Standards of Learning' Outcomes	
Agency: Henrico County Public Schools	Dates: 2005-08 Amount: \$100,000 per year
Client: Fred Morton, Superintendent of Schools, fmorton@henrico.k12.va.us , (804)652-3720	
Comment: Longitudinal, quantitative-qualitative population study of the student SOL achievement outcomes from use of 7,000 individual laptops	

Interactive, Inc. is a full-service firm that provides third-party independent analysis of learning improvement. The firm specializes in direct measures of program results and in writing reports that are grounded and compelling.

The West Virginia counties with which we have had the privilege of working are as follows.

Counties That Have Cooperated with Interactive, Inc. R&E			
Braxton	Gilmer	Mason	Ritchie
Cabell	Greenbrier	McDowell	Tucker
Calhoun	Harrison	Monongalia	Upshur
Clay	Kanawha	Ohio	Valley
Doddridge	Lincoln	Putnam	Wirt
Fayette	Marion	Raleigh	Wood

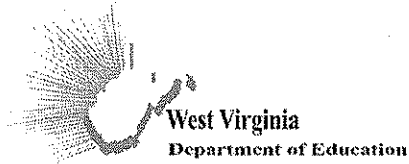
The firm's 200+ past and present R&E sites and clients include:

School Districts & States

Atlanta
Boston
Cleveland
Columbus
Dallas
Houston
Miami-Dade
New York City
San Francisco
States of Pennsylvania, New York,
Arizona, West Virginia
and Alabama

Corporations

Dell Computers
Scholastic
e-Sylvan
Homeroom.com
Houghton-Mifflin
LeapFrog
Lightspan
Plato Learning, Inc.
Pearson
Compass Learning
K12, Inc.
Sun Microsystems

Appendix I:

Interactive, Inc.
e.valuation for e.learning

Dear Teacher:

Your school is part of a pilot of Alternate Identification and Reporting (AIR) within the Response-to-Intervention program in West Virginia. Your help is critical to understanding how well AIR works in the classroom. All responses are confidential. No individuals will be identified in any report but we do need your name in order to see how AIR works or doesn't work for you now and again in the Spring. This takes only a few minutes. Please complete this brief web-survey prior to _____. THANK YOU!

Please enter the following:

Name: _____

School: _____ Grade(s): _____ Teaching specialty: _____

[Note to WVDE. These pre-data collection items measure the fidelity with which the school is implementing Rtl as part of the context for using AIR to change classroom instruction. The first 17 items are specific to AIR and will be expanded. (The introductory paragraph above will be revised for the non-AIR teachers.) They will also document baseline distributions against which progress can be monitored. We will generalize about average values across each AIR and non-AIR school's faculty.]

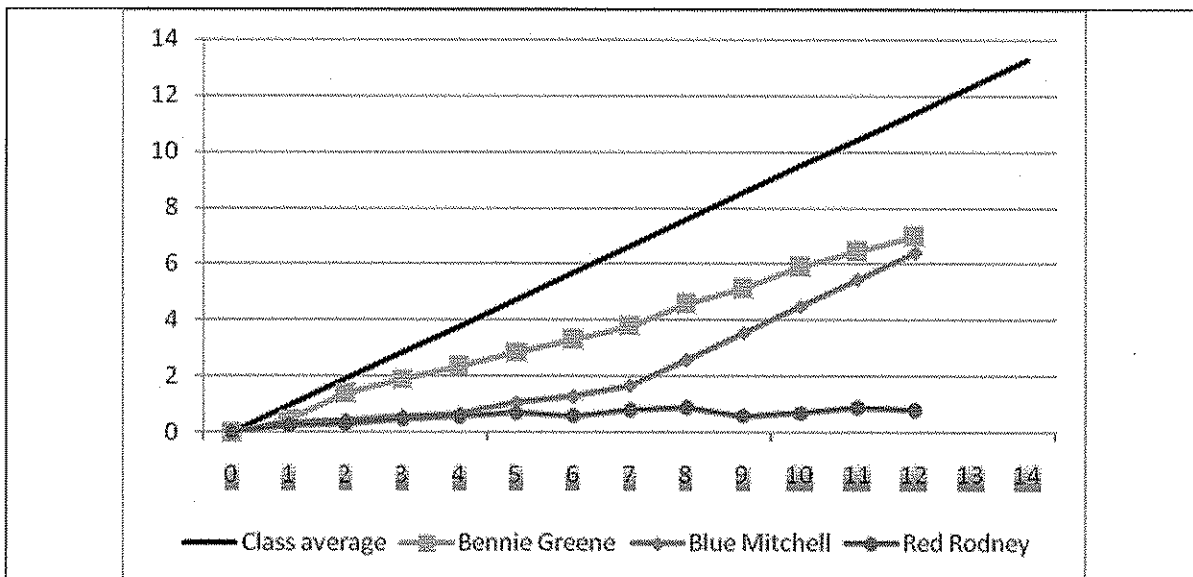
<u>Please tell us how much you agree or disagree with each of the following statements. [Strongly agree to Strongly disagree]</u>				
<u>[Standard Likert-scale format unless otherwise indicated]</u>	SA	A	D	SD
Please tell us how much you agree or disagree with the following.				
<i>AIR Attitudes and Opinions</i>				
1. For some children, high expectations sets them up for failure				
2. The performance levels for the CSO's are easy to use				
3. I know the diagnostic category of my students without the district telling me how the testing came out				

4. I always teach all children the same thing at the same time in the same way				
5. Grouping students by ability is a fair way to organize the classroom				
6. I have had enough professional development about AIR to implement it.				
7. I could do a better job with AIR if I had more technology to collect data				
8. I could do a better job with AIR if I had someone to analyze the data and tell me what they mean				
9. At the end of this year, the AIR-eligible students will be in the same place that they would have been if we had never started AIR				
10. It is hard to explain to parents how they can help unless I can talk frankly about their child's disability				
11. Most teachers still use the old categories to talk about children				
12. I would recommend AIR to other teachers				
13. I have the print materials I need to teach AIR-eligible students				
14. I have the computer-related technology I need to teach AIR-eligible students				
15. In my school, pupil diagnosis and referral is mainly the responsibility of specialists				
16. I am expected to teach from the same materials and processes that are supplied to all classrooms				
17. I have enough planning time to look at student records on a <i>quarterly</i> basis				
Implementation activities				
18. Decisions about diagnosing my students are made by a group of teachers, rather than just by me				
19. If my students are not performing, I am required to show supervisors evidence that I have changed my instructional process at least <i>quarterly</i>				
20. The way I keep student records (assessment scores, courses attempted, discipline referrals) has not changed since last year				
21. I do not have the time to implement Rtl				
22. I will not be able to implement Rtl unless I get more computer technology (for example, a handheld PDA)				
23. There are schools where 'teachers get told' and schools where 'teachers are asked'. This school is in the 'get told' group				
24. We already know what works and doesn't work in				

this school				
25. I am not persuaded that Rtl will make a major difference for my students				
26. Only a few of the other teachers in this school are enthusiastic about Rtl				
27. For AIR-eligible students, we have already been doing everything possible in this school				
<i>Factual knowledge about Rtl</i>				
	A	B	C	D
28. If a teacher in a neighboring classroom assessed all their students in October, January and April, that would indicate the classroom was: A. Tier 1 B. Tier 2 C. Tier 3				
29. If a school used Rtl with (1) students placed mainly from standardized test data and with (2) instructional interventions applied to large groups of students, it is likely that the school is using A. A standard protocol model B. A problem solving model C. Procedures that have nothing to do with Rtl				
30. Which statement best describes "Tier 3" intervention: A. Work with groups formed according to assessment information B. Work intensively with individual students C. Apply research-based instruction to all students				
31. Which is <u>not</u> a way that assessment is used in Rtl? A. Screening for all children to find those who are not progressing at expected rates B. Diagnosis of particular learning needs C. Progress monitoring in connection with specific interventions D. They are all uses of assessment within Rtl				
32. At which Tier is the emphasis on individual students, individually assessed and followed up with concentrated interventions? A. Tier 1 B. Tier 2 C. Tier 3				

<p>33. Rtl (select one)</p> <ul style="list-style-type: none"> A. Guarantees that students will have better achievement after they have been assessed B. Requires frequent cycles of assessment followed by teaching changes C. Is best used in planning for next year's class formation and instruction 				
<p>34. The primary source of information for Rtl is</p> <ul style="list-style-type: none"> A. The student's classification from previous testing B. Learning rate and level of performance C. Norm-referenced, standardized tests 				
<p>35. With respect to parents, the Rtl model</p> <ul style="list-style-type: none"> A. Does not require any changes B. Keeps them informed of decisions made by the school C. Makes them central to the eligibility decision 				
<p>36. When schools are assessing every student in given grade levels several times a year, but not more than monthly, they are focusing on which part of the RTI model?</p> <ul style="list-style-type: none"> A. Tier One B. Tier Two C. Tier Three D. Summative assessment 				
<p>37. Teachers who provide instruction in the same curriculum in about the same way as the rest of the class is receiving to small groups of students are engaged in which part of the RTI model?</p> <ul style="list-style-type: none"> A. Tier One B. Tier Two C. Tier Three D. Summative assessment 				
<p>38. Teachers who work with small groups of students using curricula and/or methods that is different from what most students are receiving, which part of the RTI model?</p> <ul style="list-style-type: none"> A. Tier One B. Tier Two C. Tier Three D. Summative assessment 				

<p>39. Approximately how many students are likely to be in Tier 3?</p> <p>A. 5%</p> <p>B. 25%</p> <p>C. 50%</p>				
<p>40. In our school we use data to differentiate or decide about</p> <p>A. Amount of time per day/week to devote to certain instructional goals</p> <p>B. Goals and expectations for student performance</p> <p>C. Instructional grouping</p> <p>D. Instructional objectives</p>				

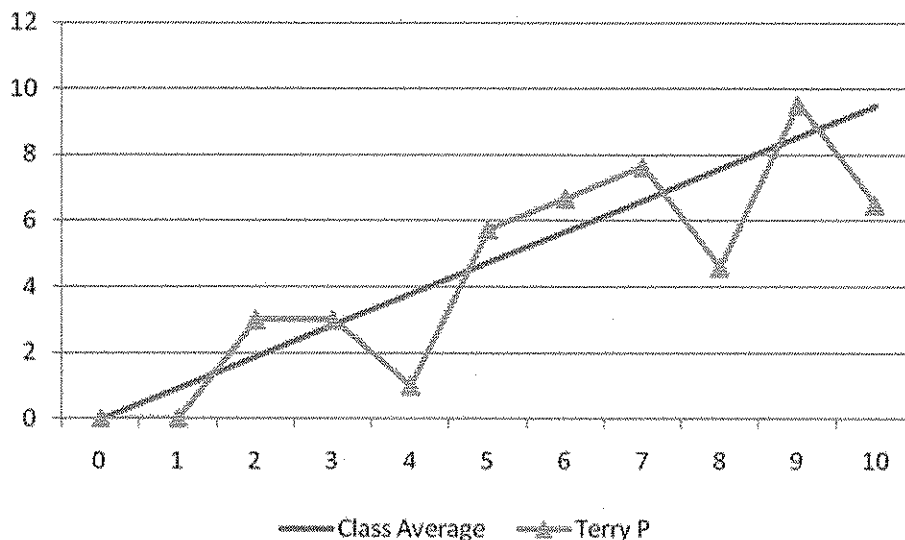


Please refer to the graph above. The average of the progress measures of students in first grade was plotted in black on the chart above. Two students were referred to the school's RTI team.

<p>41. For which student, Bennie Green, Blue Mitchell, or Red Rodney does the data suggest the most serious problem?</p> <p>A. Bennie Green</p> <p>B. Blue Mitchell</p> <p>C. Red Rodney</p>				
--	--	--	--	--

42. Who would come next in your ranking of the student's problems?

- A. Bennie Green
- B. Blue Mitchell
- C. Red Rodney



Please refer to the graph above. The average of the progress measures of the students in first grade was plotted in red on the chart above. Terry P was referred to the RTI team because of her data, also displayed on the graph.

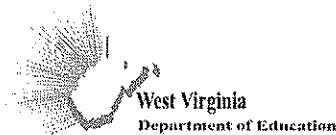
43. Which of the following options should the RTI team consider given the data?

- A. more instructional time on the target skill
- B. change the goal for the student (e.g., lower the expectation)
- C. send the student to the school counselor
- D. add an incentive (reward) for consistent performance

Attitudes and opinions about RtI

	SA	A	D	SD
44. RtI is not practical for general education students				
45. If my teaching is aligned to the CSO's, nothing more should be required of me				
46. Tier 3 students should be grouped only with other similarly classified students				
47. Tier 3 students should be in self-contained classrooms				

48. Testing all my students every month is not practical				
49. "Rtl" is the same thing as "IEP"				
50. Rtl will be helpful for non-academic areas like behavior management				
51. Rtl will only be practical for high-incidence disabilities like mild mental retardation or emotional/behavioral disorders				
52. Rtl is helpful for instruction in basic skills				
53. We already have more data than we can use in this school				
54. It is disruptive to change instructional groups in the middle of the year				
55. Rtl is more about special needs than core instruction				
56. I already know my students needs without having to assess them all the time				
57. My students need more time learning and less time spent testing				
58. My colleagues work hard to improve the academic achievement of AIR-eligible students				
59. This school has done everything it can to improve the academic achievement of AIR-eligible students				

Appendix II:

Interactive, Inc.
 e.valuation for e.learning

Dear Principal:

Your school is part of a pilot demonstration project of *Alternate Identification and Reporting* (AIR). Your help is central to understanding how well AIR works. All responses are confidential and no individuals will be identified. This takes only a few minutes. Please complete this very brief web-survey prior to _____.
 THANK YOU!

Please enter the following:

School: _____ District: _____

[These pre-data collection items are intended to help identify outliers and to establish baseline distributions. They are grouped by study question. For principals, we do not recommend asking "factual" questions or about their "attitudes and opinions". The unit of analysis is the school. In the instance of the administrators, we will generalize about average values across all principals in the AIR and non-AIR schools.]

<i>Please tell us how much you agree or disagree with each of the following statements. [Strongly agree to Strongly disagree]</i>				
Please tell us how much you agree or disagree with the following.	SA	A	D	SD
1. I don't think any of my teachers could be described as "AIR experts"				
2. Most teachers have been doing AIR for a year or more				
3. We used universal screening to test all students at the beginning of the year				
4. This school is ready to serve as a model for other schools interested in implementing AIR				
<i>Implementation activities</i>				
5. AIR is one of my top three priorities				
6. The press of other business keeps us from finding time to plan as a faculty				
7. This school has an AIR leadership team				
8. This school has the technology necessary to support AIR				
9. If a class is not performing, I increase my supervision of that teacher				
10. I have changed my personal supervision and evaluation procedures to reflect the demands that RtI makes on teachers				
11. The AIR initiative is being pushed by a small group in				

the school				
12. The way teachers keep student records (assessment scores, courses attempted, discipline referrals) has not changed since last year				
13. I do not have the time to implement AIR				
14. This school will not be able to implement AIR unless we get more computer technology (for example, a handheld computer)				
15. There are schools where 'teachers get told' and schools where 'teachers are asked'. This school is in the 'get told' group				
16. We already know what works and doesn't work in this school				
17. Only a few of the teachers are enthusiastic about AIR				
18. For special needs students, we have already been doing everything possible in this school				
19. In this school, curriculum decision making is concentrated with administrators and special experts				
20. It is not realistic to wait for all the teachers to agree before we introduce a change				
Attitudes and Opinions about AIR				
21. For some children, high expectations sets them up for failure				
22. The performance levels for the CSO's are easy for teachers to use				
23. Most teachers know the diagnostic category of their students without the district telling them how the testing came out				
24. Consistency of instruction is important. We should teach all children the same thing at the same time in the same way				
25. Grouping students by ability is a fair way to organize classrooms				
26. The teachers have had enough professional development about AIR to implement it				
27. The teachers could do a better job with AIR if they had more technology to collect data				
28. There should be a specialist in the school to analyze the data and tell me and the teachers what they mean				
29. At the end of this year, the AIR-eligible students will be in the same place that they would have been if this school had never started AIR				
30. It is hard to explain to parents how they can help unless the teachers and I can talk frankly about their child's disability				
31. Most teachers still use the old categories to talk about children				
32. I would recommend AIR to other schools				

Appendix III:

Student Web Survey PRE

[Note: Web survey data may or may not be useful with the students. We will field a version of the following --- after revisions with WVDE --- and examine the validity and reliability of student responses. Whether or not we continue web survey data collection for students we will apply a range of additional data collection techniques described in the proposal text, for example, video-conferencing, casual-setting peer interviews and so on.]

	SA	A	D	SD
1. I have to take a lot of tests				
2. My teacher treats everyone the same				
3. Everybody in the class gets the same work to do				
4. I don't do very much by myself work in my classes				
5. We don't do very much work in small groups				
6. The classroom aide helps me more than other students				
7. Sometimes I have to go to another room to get extra help				
8. Most of the time in class, my teacher talks				
9. After I take a test, it takes a long time to find out how I did				
10. The class gets interrupted by other kids a lot				
11. My teacher does not have "favorite" students				
12. Sometimes the teacher goes too fast for me				
13. Sometimes I am bored because the teacher is going too slow				
14. Every time I ask for help, my teacher helps me				
15. I have to move to different classrooms a lot				

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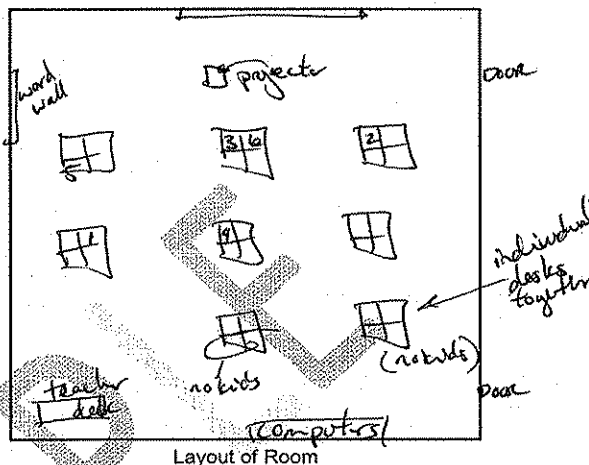
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Appendix V:

Interactive, Inc.
e.valuation for e.learning

10X 10 OBSERVATION GUIDE

1. School: ABC County MS
2. Teacher: J. Smith
3. Other adults in the room: T. Busch
4. Class/Topic/Grade: English 6.7
5. Time: IN 7:00 : 7:20
Time: OUT 7:40 : 8:00
6. Number of students: 26
7. Number of (AIR)(IEP) students: 6
8. Indicate seating placement of II/III/IEP students on layout.
9. Names of (AIR)(IEP) students, circle category, tally other columns



Name	Category	Raised Hand	Called on	Disruptions	Time on task
1. <u>Jake Cleary</u>	<u>II/III/IEP</u>	<u>HHH</u>	<u>11</u>	<u>111</u>	<u>2 min</u>
2. <u>Alexa Trujillo</u>	<u>II/III/IEP</u>	<u>1</u>	<u>1</u>		<u>10 min</u>
3. <u>Anthony Smith</u>	<u>II/III/IEP</u>				<u>most of time</u>
4. <u>Stacy Brown</u>	<u>II/III/IEP</u>	<u>11</u>			<u>all</u>
5. <u>Destiny Dewitt</u>	<u>II/III/IEP</u>				<u>in line time</u>

10. Instruction grouping: ☐ Individual ☒ Small group ☐ Large Group
11. Physical grouping: ☐ Heterogeneous ☐ Homogeneous
12. Teacher during group work: ☐ one group ☒ all groups ☐ no groups
13. Students work: ☐ With Teacher ☐ Individually ☒ Both
14. Instruction: ☐ Lecture ☒ Group Work ☐ Test
- ☐ Question/Answer ☐ Lab/Hands-on ☐
15. Aide available: ☒ Yes ☐ No ☐ Helping all ☐ Helping one ☐ Helping IEP(s)
16. Teacher actions: ☒ Call on II/III/IEP ☐ Call on raised hands only
17. Number of discipline incidents: HHH HHH 11
18. Positive Behavior Support instances:
19. Other comments:

6. Lance Jones IEP called on 1 2 min off task

class loud with lots of
questions; good once knew
what to do; working
on words/vocab
together; highly
engaged

115 Hanover Avenue, Suite 2 • Ashland, Virginia 23005-1813
Phone: 804-798-8700 • www.interactiveinc.org • Fax: 804-798-8722

State of West Virginia

VENDOR PREFERENCE CERTIFICATE

Certification and application* is hereby made for Preference in accordance with **West Virginia Code, §5A-3-37**. (Does not apply to construction contracts). **West Virginia Code, §5A-3-37**, provides an opportunity for qualifying vendors to request (at the time of bid) preference for their residency status. Such preference is an evaluation method only and will be applied only to the cost bid in accordance with the **West Virginia Code**. This certificate for application is to be used to request such preference. The Purchasing Division will make the determination of the Resident Vendor Preference, if applicable.

1. **Application is made for 2.5% resident vendor preference for the reason checked:**
 _____ Bidder is an individual resident vendor and has resided continuously in West Virginia for four (4) years immediately preceding the date of this certification; or,
 _____ Bidder is a partnership, association or corporation resident vendor and has maintained its headquarters or principal place of business continuously in West Virginia for four (4) years immediately preceding the date of this certification; or 80% of the ownership interest of Bidder is held by another individual, partnership, association or corporation resident vendor who has maintained its headquarters or principal place of business continuously in West Virginia for four (4) years immediately preceding the date of this certification; or,
 _____ Bidder is a nonresident vendor which has an affiliate or subsidiary which employs a minimum of one hundred state residents and which has maintained its headquarters or principal place of business within West Virginia continuously for the four (4) years immediately preceding the date of this certification; or,
2. **Application is made for 2.5% resident vendor preference for the reason checked:**
 _____ Bidder is a resident vendor who certifies that, during the life of the contract, on average at least 75% of the employees working on the project being bid are residents of West Virginia who have resided in the state continuously for the two years immediately preceding submission of this bid; or,
3. **Application is made for 2.5% resident vendor preference for the reason checked:**
 _____ Bidder is a nonresident vendor employing a minimum of one hundred state residents or is a nonresident vendor with an affiliate or subsidiary which maintains its headquarters or principal place of business within West Virginia employing a minimum of one hundred state residents who certifies that, during the life of the contract, on average at least 75% of the employees or Bidder's affiliate's or subsidiary's employees are residents of West Virginia who have resided in the state continuously for the two years immediately preceding submission of this bid; or,
4. ☒ **Application is made for 5% resident vendor preference for the reason checked:**
 _____ Bidder meets either the requirement of both subdivisions (1) and (2) or subdivision (1) and (3) as stated above; or,
5. **Application is made for 3.5% resident vendor preference who is a veteran for the reason checked:**
 _____ Bidder is an individual resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard and has resided in West Virginia continuously for the four years immediately preceding the date on which the bid is submitted; or,
6. **Application is made for 3.5% resident vendor preference who is a veteran for the reason checked:**
 _____ Bidder is a resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard, if, for purposes of producing or distributing the commodities or completing the project which is the subject of the vendor's bid and continuously over the entire term of the project, on average at least seventy-five percent of the vendor's employees are residents of West Virginia who have resided in the state continuously for the two immediately preceding years.

Bidder understands if the Secretary of Revenue determines that a Bidder receiving preference has failed to continue to meet the requirements for such preference, the Secretary may order the Director of Purchasing to: (a) reject the bid; or (b) assess a penalty against such Bidder in an amount not to exceed 5% of the bid amount and that such penalty will be paid to the contracting agency or deducted from any unpaid balance on the contract or purchase order.

By submission of this certificate, Bidder agrees to disclose any reasonably requested information to the Purchasing Division and authorizes the Department of Revenue to disclose to the Director of Purchasing appropriate information verifying that Bidder has paid the required business taxes, provided that such information does not contain the amounts of taxes paid nor any other information deemed by the Tax Commissioner to be confidential.

Under penalty of law for false swearing (West Virginia Code, §61-5-3), Bidder hereby certifies that this certificate is true and accurate in all respects; and that if a contract is issued to Bidder and if anything contained within this certificate changes during the term of the contract, Bidder will notify the Purchasing Division in writing immediately.

Bidder: Interactive, Inc.

Signed: [Signature]

Date: 110408

Title: MANAGING DIRECTOR

*Check any combination of preference consideration(s) indicated above, which you are entitled to receive.

STATE OF WEST VIRGINIA
Purchasing Division

PURCHASING AFFIDAVIT

VENDOR OWING A DEBT TO THE STATE:

West Virginia Code §5A-3-10a provides that: No contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and the debt owed is an amount greater than one thousand dollars in the aggregate.

PUBLIC IMPROVEMENT CONTRACTS & DRUG-FREE WORKPLACE ACT:

West Virginia Code §21-1D-5 provides that: Any solicitation for a public improvement construction contract shall require each vendor that submits a bid for the work to submit at the same time an affidavit that the vendor has a written plan for a drug-free workplace policy in compliance with Article 1D, Chapter 21 of the West Virginia Code. A public improvement construction contract may not be awarded to a vendor who does not have a written plan for a drug-free workplace policy in compliance with Article 1D, Chapter 21 of the West Virginia Code and who has not submitted that plan to the appropriate contracting authority in timely fashion. For a vendor who is a subcontractor, compliance with Section 5, Article 1D, Chapter 21 of the West Virginia Code may take place before their work on the public improvement is begun.

ANTITRUST:

In submitting a bid to any agency for the state of West Virginia, the bidder offers and agrees that if the bid is accepted the bidder will convey, sell, assign or transfer to the state of West Virginia all rights, title and interest in and to all causes of action it may now or hereafter acquire under the antitrust laws of the United States and the state of West Virginia for price fixing and/or unreasonable restraints of trade relating to the particular commodities or services purchased or acquired by the state of West Virginia. Such assignment shall be made and become effective at the time the purchasing agency tenders the initial payment to the bidder.

I certify that this bid is made without prior understanding, agreement, or connection with any corporation, firm, limited liability company, partnership or person or entity submitting a bid for the same materials, supplies, equipment or services and is in all respects fair and without collusion or fraud. I further certify that I am authorized to sign the certification on behalf of the bidder or this bid.

LICENSING:

Vendors must be licensed and in good standing in accordance with any and all state and local laws and requirements by any state or local agency of West Virginia, including, but not limited to, the West Virginia Secretary of State's Office, the West Virginia Tax Department, West Virginia Insurance Commission, or any other state agencies or political subdivision. Furthermore, the vendor must provide all necessary releases to obtain information to enable the Director or spending unit to verify that the vendor is licensed and in good standing with the above entities.

CONFIDENTIALITY:

The vendor agrees that he or she will not disclose to anyone, directly or indirectly, any such personally identifiable information or other confidential information gained from the agency, unless the individual who is the subject of the information consents to the disclosure in writing or the disclosure is made pursuant to the agency's policies, procedures and rules. Vendors should visit www.state.wv.us/admin/purchase/privacy for the Notice of Agency Confidentiality Policies.

Under penalty of law for false swearing (West Virginia Code §61-5-3), it is hereby certified that the vendor acknowledges the information in this said affidavit and is in compliance with the requirements as stated.

Vendor's Name: Interactive, Inc.

Authorized Signature:  Date: 110408