Technology Plan Implementation

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New Jersey City University

November 14, 2014

EDTC 631: Administration and Supervision of Technology in Education

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Individual Section Contributions

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October Hudley: Technology Plan for At- Risk Students, Action Plans 7 & 8

The following narrative summary and action plan details the implementation of technology to meet the needs all students taking English and language arts courses. The narrative summary precedes the individual action plan sheets and provides a level of explanation and research-based justification not possible in the action plan sheets that follow. This action plan was designed to align with the new Common Core ELA standards for both reading and writing while addressing the needs of all learners, including: (1) those in regular education classrooms, (2) those in special education classrooms, (3) those who are English language learners, and (4) those at risk.

Meeting the Curricular Writing Needs of the General Education Student

The Common Core English and language arts standards pose demanding alternatives to the writing tasks traditionally posed in k-12 classrooms. These new writing standards represent a shift away from a reliance on creative and opinion-based writing prompts that, according to the authors of the Common Core Standards "will not prepare students for the demands of college, career, and life" (Common Core, 2014) to new emphasis on analytical, fact-based pieces. Students are expected to write with the "command of sequence and detail that are essential for effective argumentative and informative writing" and to "focus on evidence-based writing along with the ability to inform and persuade" (Common Core, 2014). These new demands require a greater emphasis on planning and executing more sophisticated written arguments. Further, analytical writing is recognized as a difficult task (Sousa, 2005), necessitating that educators devise authentic and motivating reasons to engage in such writing. The two goals of this action plan are designed to meet these needs.

The first goal addresses the challenging of planning and executing sophisticated written arguments using what Jonassen (2006) refers to as concept maps, or graphic organizers that depict the complex relationships between ideas. These concept maps form the prewriting necessary to lay out the arguments demanded by the Common Core Standards. The Inspiration and Inspiration Data concept mapping software packages facilitate the editing and rearrangement of complex ideas into formal text and represent a powerful technological tool to address this concept mapping need. The plan that follows includes extended professional development time for teachers to not just master the software, but develop practical curricular activities that incorporate its potential into the district's English/language arts program because experience shows that simply helping teachers use a new software program is not enough to insure its effective implementation (Frazier, 2012). Further, the plan demands assessment of this software and its activities through the use of three distinct measures: (1) student performance on the district mandated authentic assessment used to meet the needs of the state's student growth objectives used to evaluate teachers, (2) student performance on the SAT writing section, and (3) student final exam grades on their writing prompt. From these sources of assessment teachers and the English department supervisor will revise the curricular activities developed for the first year to enhance instruction in the years that follow.

Finally, the second goal addresses the need to motivate students to engage in the demanding task of creating such demanding written products by providing a formal venue for publication. This goal prompts the district to create a forum on the school website to publish and publicize student writing. Research suggests that students are motivated to produce high quality products when they fulfill authentic purposes for a community that extends beyond the classroom (Bransford et al., 2000; Ormrod, 2003). This webpage of

student writings will showcase their efforts and provide both students and the school community with a source of pride and evidence that the demanding Common Core writing standards are being met.

Special Education Technologies for Writing and Reading

All students are assessed for writing and reading abilities, whether it is formative or summative. Writing, and all that it entails—notetaking, pre-writing, editing, completing drafts—can be hampered by a student's learning disabilities. Similarly, reading, which includes fluency and comprehension, can be hindered. The use of assistive and adaptive technology can aid students of all abilities to effectively prepare for college and career life (Dell, Newton, & Petroff, 2012). The tools in this action plan meet the framework for Universal Design for Learning (UDL)—each technology "can be customized and adjusted for individual needs" (CAST, 2014). In other words, general education students would also benefit from assistive and adaptive technology tools, thereby increasing the proficiency of the entire school population. GlogsterEDU, BrainPOP, as well as Classical Comics, are featured in the textbook *Assistive Technology in the Classroom* as examples of inclusive technologies that support UDL standards (2012). Read Write Think is a free service providing teacher development on its literacy-based reading, writing, and assessment toolkit.

The researcher tasked with recommending assistive technologies researched the efficacy of each product. They were vetted based on published case study research and white papers pertaining to how the technologies were successful in their intended interventions. The Regarding prewriting concept mapping, Mindmeister has seven posted case studies attesting to its efficacy as a tool to teach writing; three of the studies are from K-12 classroom teachers. Concept maps visually "show the relationship among ideas" (Dell, Newton, & Petroff, 2012, p. 26). Livescribe's "smartpens" posted several video studies on its website. As a tool, it records

handwriting and records audio. The recordings, called "pencasts" (a portmanteau of pen and broadcast), meet with universal design for learning (UDL) standards for multiple means of representation (CAST, 2014). It featured two 2010 school-based case studies, one from Collier County District, FL, titled *UDL and Smartpens*, and the other from St. Johns School, NY, *Student Assessment with Smartpens*. Dragon's parent company, Nuance, posts white papers speaking to its success for special education students, plus how it meets UDL. Read Write Think, a free web portal from the International Reading Association, also features inclusive resources.

Regarding reading, Starfall's website portal features a case study attesting to an increase in individual student proficiency scores. The report, published in February 2014, is titled, *Evaluation of the Starfall Kindergarten Curriculum in Roaring Fork School District*. Similarly, Istation featured an entire webpage dedicated to awards and endorsements, from teachers, states, and school districts. Reading Mate's curriculum is a subsidiary of Edmentum, the developer of assessment preparation tool, Study Island. BrainPOP features several research studies on its educator portal, including ones it sponsored with the Joan Ganz Cooney Center at Sesame Workshop. BrainPOP videos can all be viewed with closed-captions, meeting UDL Framework for Multiple Means of Representation. Each video is followed by a quiz, which teachers can view and track.

Many of the tools included robust teacher dashboards, enabling instructors to track individual student analytics. Those assistive technologies that did not lend themselves to computer-based tracking can be assed by teacher-created authentic assessments. For example, concept maps created with Mindmeister and notes taken with Dragon Natural and/or Livescribe would require a rubric to formatively assess progress. Glogster is a presentation tool that would also be best graded authentically, by rubric. Some curriculum packages, including *Classical Comics*, are packaged with worksheets, handouts, and other teacher-graded assessment materials.

Blending Technology into the English Language Learners Instructional Program to Increase Proficiency

Language is needed to participate in every situation people encounter around the globe. It is one of the many systems of creating meaning in everyday life (Halliday and Hasan, 1985). Language serves as a vehicle to accomplish what we need to communicate with other people. According to Fillmore & Snow (2002), students need direct and frequent opportunities to interact in English for language development and increased social communication. The districts mission is to provide English Language Learners (ELL) with a high quality education, designed to assist students in learning English and to meet the New Jersey content standards. It is important for all ELL students to have direct and frequent interactions with teachers and students to increase language development. The district is introducing an ELL instructional program that supports academic and social development. All English language learners in grades six through eight will participate in this instructional program. The program is based on scientific research and designed around New Jersey's Core Curriculum Content Standards (CCCS), The World-Class Instructional Design and Assessment Standards (WIDA), and The Next Generation Science Standards.

The WIDA Standards are a framework of how to understand the philosophies and foundation principles that support language development. These standards were designed from research and the latest developments in both English language and content standards. In addition, the standards are consistent with linguistic and educational theory and comply with federal legislation. The software programs and applications proposed in the Action Plan will provide the ELL students with various opportunities for interaction and engagement in academic programs (Frey, Fisher & Rothenber, 2008).

The Inspiration software was selected for this Action Plan because it can support our district's mission to increase language development for all ELL students in grades six through eight. Inspiration provides student to a visual education by using graphic organizers and idea maps. Graphic organizers can enhance skills such as developing and organizing ideas, understanding concepts, and seeing relationships. The Institute for the Advancement of Research and Education (IARE) selected 29 educational research studies which supported the use of graphic organizers for improving student learning and performance with diverse students. SMART Notebook software was selected for this Action Plan because it can support many different learning styles, be applied in all content areas, and be used in a variety of learning environments. A study conducted by Zirckle (2003) reported SMART Notebooks produced positive grade changes from six-week to six-week period as well as from unit to unit. Another research study conducted in the United Kingdom found the whiteboard made teaching more visual and learning more interactive which improved student participation and concentration (Bush, 2004).

BrainPOP was selected for this action plan because it provides both teachers and students with over 1,000 short animated videos for science. BrainPOP also offer short quizzes, inspired student projects, and other related materials to reinforce terminology and science concepts. According to Mayer (2005), information is more effective when presented in words and pictures than words alone. In addition, BrainPOP has mobile learning apps which are available for iOS, Android, Windows 8, Kindle, and Google Chrome users. These mobile apps would allow students to watch the videos on any mobile device and be prepared to discuss the information the next day in class. This would support the philosophy of "flipping the classroom." SEG Research conducted a multi-site study between January 2009 and June 2009 using 1,100 students. They compared the gains made by students in classes using BrainPOP to

those of a Control group of students in classes that did not use BrainPOP. Students enrolled in classrooms using BrainPOP achieved substantially greater gains in science and language than students enrolled in classes that did not use BrainPOP. Furthermore, students in classes using BrainPOP increased their SAT 10 scores between 11 and 24 points.

PhET was selected for this Action Plan because it is an interactive science simulation which utilizes a variety of methods to visualize, interpret and communicate about the world of science. In science education, it is common to use computers in the classroom is to run science simulations (National Research Council, 2011). The district intends to design an ELL curriculum that is student-centered and inquiry-based and the simulations would support our efforts. The PhET science simulations have unique set of features that allow students to interact with the simulation interface. The science content is illustrated by the simulation and designed to cover a particular topic in science. The framework of the interactive simulation encourages students to investigate a science concept which is consistent with prior work on "play" (Rieber, 1996; Vygotsky, 1978) and leads students into a "situational" environment (Dewey, 1938).

Technology Plan for At- Risk Students

At-Risk students are faced with many challenges from violent and chaotic homes. Schools in the low poverty areas also provides services such as field trips and weekend back packs where students are able to take non-perishable foods home to eat for the weekend. In spite of their low economic status, they are deserving of a curriculum that will prepare them with the essentials to become successful. There are dedicated teachers who set aside time before and after school for students who may not have access to a computer at home, to be able to use computers to complete class assignments (Landsman, 2014).

The Library Media Specialist role is crucial in providing teachers with resources to enhance instructions. According to the Action Plan, the Library Media Specialist are qualify to implement research based technology program for At-Risk students. The Library Media Specialist according to the American Association of School Librarians help students develop the "expertise in accessing, evaluating, and using information is in fact, the authentic leaning and modern education seeks to promote" (Neuman, 2011). Based on results of the research based program and reports, visuals and differentiated instruction is tailored to addresses the needs of the students. The research web based program contributes to the success of student understanding and processing a complex information aligned to the 2014 New Jersey Core Content Technology Standards.

Upon completions of the web based reading programs allows the At-Risk students become cognizant of their ability to reflect on the steps taken to improve their reading performance. The researched based programs encourages students to use digital technologies and enriched activities to engage and motivate them to excel to their highest reading abilities (Laverick, 2014). E-books and web based research resources provided the At-Risk students the opportunities to address problem-solving, comprehension, and decoding skill as a tactic to increase their reading levels (Iaquinta. 2006).

Action Plan – Regular Education

School:	**Principal:**	**Date Submitted**:

Section A –Describe your goal, target audience, and identify which need(s) the goal addresses. (Refer to prior data analysis regarding needs)

Goal #1	Our school will incorporate technology to assist developing writers with the organization their thoughts so they can plan effective writing that develops their: (1) point of view, (2) presentation of logical and clear ideas, and (3) use of precise language.
Target Audience	General education students in regular education and college placement English and Language Arts classes.
Identified Needs	This goal aligns with Common Core English/Language Arts writing standards CCSS.ELA-Literacy.W.11-12.1 (Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence) and CCSS.ELA-Literacy.W.11-12.2 (Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content). In addition, this goal will align with the districtwide goal of increasing SAT scores by addressing the SAT Writing Task.

Outcomes/Objectives Section B- The outcomes must be measureable and directly aligned to Goal. <u>This outcome/objective must be one of your technology related outcomes/objectives from Project #4 for this Goal</u>	**ACTION STEPS** – Section C – Descriptively list the action to ensure progress toward your goal. Action steps are strategies and interventions which should be research-based where possible and may *include professional development, technology, communication, and parent and community involvement initiatives within the action steps.(Use as many steps as you need for each Outcome)*	**IMPLEMENTATION INFORMATION** Section D– For each of the Action Steps you list, give timeline, person(s) responsible (for management, coordination and monitoring), required resources (infrastructure- services, physical and human resources),projected cost(s)/funding sources, evaluation data source with identified instrument/methodology, and principal strategies and responsibilities. (For Evaluation Strategy, define how you will evaluate the action step.)					
		Timeline (begin-end date for each step)	Person Responsible for coordination and reporting – point person	Required Resources (People, technology, furniture, etc.)	Estimated Projected Cost(s) and Funding Sources	Evaluation Data Source and Instruments used	Principal's Strategies and Responsibilities to insure success for each step
Outcome/Objective #1- IN THIS BOX - this outcome is only related to Goal 1	1) Instructional Technology department will purchase a dual site license for the Inspiration 9 and Inspiration Data mind-mapping software packages.	August 2015	Director of Instructional Technology	n/a	Inspiration 9 Software Package $45.95/seat. Inspiration Data Software Package $59.00/seat	Product Invoices	Insure English Department Chair inspects software installation on 40 machines installed in English Wing Computer Lab

					Total cost/seat: $104.95 40 Seats: $4198.00		
	2) Provide professional development for grade 9-12 English teachers	September 2015 start of academic year professional development	Director of Instructional Technology & English department supervisor	English Wing Computer Lab	Professional Development Facilitator Stipend (for English Department Head) $40/hour x 5 hours = $200	Professional development Teacher Feedback questionnaire	Grant professional development time to Instructional Tech Supervisor and English Department Supervisor, including professional days to attend Inspiration training. Evaluate teacher feedback questionnaire
	3) Provide curriculum development time for English teachers to develop instructional materials that use the Inspiration 9 and Inspiration Data software packages to plan essays that align with Common Core instructional goals and SAT assessment prompts.	September-October 2015	English Department Supervisor	Department Meeting and PLC time to develop curricular materials that implement and capitalize on the Inspiration software	n/a	Curricular Materials developed by English teachers	Obtain briefing about curriculum plans to implement of new software in October 2015 administrative cabinet meeting
	4) Implement curricular materials that use Inspiration software packages	November 2015-March 2016	English teachers in grades 9-12	English wing computer lab, shared among staff by usual sign-up procedures	n/a	English Student Growth Objective (SGO) authentic assessments, April 2016.	The principal and English Department Supervisor will meet twice (once in winter quarter and once before spring SGOs) to discuss student growth in writing and the use

						SAT Score reports English final exam writing samples	of the Inspiration software. The principal, in conjunction with the English Department Supervisor will process descriptive statistics data to define student success rate with SGO, SAT, and final exam assessments. Data will be compared with previous year achievement data. Two independent sample t-test will be performed to assess significance of score changes and effect sizes will be computed.
	4) Revision of curricular materials that use Inspiration software packages	Summer 2016	English Teachers & English Department Supervisor	Teachers will be allowed to keep their school-issued laptop computers over the summer to facilitate editing curriculum.	Curriculum Development Stipend (for English Department teachers who modify and edit curricular materials to better incorporate the Inspiration software packages) $40/hour x 10 hours = $400	Edited/new curricular documents & results of curricular change action plan	The principal will ensure the prompt compensation of teachers participating in the curricular modifications.

Action Plan – Regular Education

School:	**Principal:**	**Date Submitted**:

Section A –Describe your goal, target audience, and identify which need(s) the goal addresses. (Refer to prior data analysis regarding needs)

Goal #2	Our school will incorporate technology to assist in the publication of student writing via the web in alignment with Common Core writing standard CCSS.ELA-Literacy.W.11-12.6 (Use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information.)
Target Audience	General education students in regular education and college placement English and Language Arts classes.
Identified Needs	Writing is a challenging activity and educational research suggests the need for authentic purposes for writing (Bransford, Brown, & Cocking, 2000; Ormrod, 2003) to motivate deep, meaningful participation in the kind of writing tasks that will increase achievement on the SATs and align with Common Core Writing Standards.

Outcomes/Objectives Section B- **The outcomes must be measureable and directly aligned to Goal. <u>This outcome/objective must be one of your technology related outcomes/objectives from Project #4 for this Goal</u>**	**ACTION STEPS** – Section C – Descriptively list the action to ensure progress toward your goal. Action steps are strategies and interventions which should be research-based where possible and may *include professional development, technology, communication, and parent and community involvement initiatives within the action steps. (Use as many steps as you need for each Outcome)*	**IMPLEMENTATION INFORMATION** Section D– For each of the Action Steps you list, give timeline, person(s) responsible (for management, coordination and monitoring), required resources (infrastructure- services, physical and human resources),projected cost(s)/funding sources, evaluation data source with identified instrument/methodology, and principal strategies and responsibilities. (For Evaluation Strategy, define how you will evaluate the action step.)					
		Timeline (begin-end date for each step)	Person Responsible for coordination and reporting	Required Resources (People, technology, furniture, etc.)	Estimated Projected Cost(s) & Funding Sources	Evaluation Data Source and Instruments used	Principal Strategies and Responsibilities to insure success
Outcome/Objective #1- IN THIS BOX – this outcome is only related to Goal 2, not Goal 1	1) Develop an online journal available via the school website to publish issue-based and factual student essays written in English courses.	July-August 2015	Director of Instructional Technology	Dedicated space on a new page on the school website, editable by teachers in the English Department, with an approval step for the English Department Supervisor.	None	English teachers will assess the webpage, the online journal format, and the content guidelines.	Principal must work with English Department Supervisor and Director of Instructional Technology to design the online Journal, the webpage,

							and establish content guidelines.
	2) English teachers will assess the webpage, the online journal format, and the content guidelines.	September 2015	English Department Supervisor	n/a	None	English teachers will complete a feedback form assessing all aspects of the online student publication portal.	Principal will ensure that the English Department Supervisor coordinates changes to publication webpage based on teacher suggestions and works with the Director of Instructional Technology to implement the suggestions. Principal will require a report of the new publication and its procedures at the October administrative cabinet meeting.
	3) Students will submit writing for publication on a bi-monthly basis.	October 2015-June 2016	English Teachers and English Department Supervisor.	Class time and curricular assignments that make use of the Inspiration pre-writing software packages to facilitate the creation of written work of publishable quality.	None	English teachers will evaluate the work of their students and provide constructive feedback during iterations of the writing process.	Principal will highlight student writings during presentations to the board of education, parent assemblies, faculty meetings, and other instances that have the potential of increasing the

							student writers' audience.
	4) Year of student writings will be compiled into an archival compendium, in .pdf form, available via the school website.	June 2016	English Teacher chairing student publication committee.	PDF file editor (such as Nuance PDF) installed and updated on Chair of Student Publication Committee.	Nuance PDF: $79.99	n/a	n/a

Action Plan—Special Education Technologies for ELA CCSS Writing

School:	**Principal:**	**Date Submitted**:

Section A –Describe your goal, target audience, and identify which need(s) the goal addresses. (Refer to prior data analysis regarding needs)

Goal #3	All students are assessed for writing abilities, whether it is formative or summative. Writing, and all that it entails—notetaking, pre-writing, editing, completing drafts—can be hampered by a student's learning disabilities. The use of assistive and adaptive technology can aid students of all abilities to effectively prepare for college and career life (Dell, Newton, & Petroff, 2012).
Target Audience	Special education students in general education English language arts classes.
Identified Needs	CCSS.ELA-LITERACY.W.9-10.2 Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content.

Outcomes/ Objectives Section B- The outcomes must be measureable and directly aligned to Goal. <u>This outcome/objective must be one of your technology related outcomes/objectives from Project #4 for this Goal</u>	**ACTION STEPS** – Section C – Descriptively list the action to ensure progress toward your goal. Action steps are strategies and interventions, which should be research-based where possible and may *include professional development, technology, communication, and parent and community involvement initiatives within the action steps. (Use as many steps as you need for each Outcome)*	**IMPLEMENTATION INFORMATION** Section D– For each of the Action Steps you list, give timeline, person(s) responsible (for management, coordination and monitoring), required resources (infrastructure- services, physical and human resources),projected cost(s)/funding sources, evaluation data source with identified instrument/methodology, and principal strategies and responsibilities. (For Evaluation Strategy, define how you will evaluate the action step.)					
		Timeline (Begin-end date for each step)	Person Responsible for coordination and reporting – point person	Required Resources (People, technology, furniture, etc.)	Estimated Projected Cost(s) and Funding Sources	Evaluation Data Source and Instruments used	Principal's Strategies and Responsibilities to insure success for each step
Outcome/ Objective #1- IN THIS BOX - this outcome is only related to Goal 1	1) Assistive software that supports Common Core Writing Skills for dyslexic students	September 2015-June 2016	Reading specialist, in conjunction with the teacher who assesses prewriting and notetaking.	*Dragon Natural,* (student/teacher edition) software, computers, tablets.	• $99 per license x 10 licenses = $1,000 http://www.nuance.com/for-business/by-industry/education/dragon-education-		Reading specialist and child study team (CST) who collect anonymized digital samples of student notes. Increase of student

					solutions/index.htm • Funding Source: ELA Department funds		writing to proficient using student and department-based assessments, as well as writing rubrics that are aligned to the PARCC Assessment. School will pay subscription for Nuance University online training – http://shop.nuance.com/store/nuanceus/en_US/DisplayProductDetailsPage/ThemeID.20545600/productID.306341200
	2) Software that support collaborative, real-time concept mapping	September 2015 – February 2016 (6 months) as per the subscription plan, which leads to spring PARCC Assessment.	General education teachers, in conjunction with special education teachers who have the ability to monitor and aide student progress synchronously.	*Mindmeister* subscription, computers, tablets.	• $6 per user for 6 months, or 300 x $6 = $1,800 https://www.mindmeister.com/pricing/edu • Funding Source: Child study team funds	Real-time, live synchronous teacher and peer collaboration on concept mapping graded by rubric.	Increase of student writing to proficient using student and department-based assessments, as well as writing rubrics that are aligned to the PARCC Mindmeister offers 4 online courses in its Mindmeister Academy –

							http://www.mindmeister.com/training
	4) Assistive software that supports notetaking for dyslexic students	September 2015-June 2016	Reading specialist and child study team (CST) who collect anonymized digital samples of student notes.	Livescribe Smartpens, "pencasting" can be sent to any device.	• $100 per pen x 10 = $100 K-12 Institutional discounts - http://www.livescribe.com/en-us/media/pdf/solutions/2013_Livescribe_Education_Price_Sheet.pdf • Funding Source: Child study team funds	http://www.livescribe.com/en-us/solutions/learningdisabilities/	Increase of student writing to proficient using student and department-based assessments, as well as writing rubrics that are aligned to the PARCC Assessment. A representative from LiveScribe will conduct PD training on best practices.
	4) Software that support collaborative, writing, speaking, and multimedia presentations, meeting UDL	September 2015-June 2016	General education teachers, in conjunction with special education teachers who have the ability to monitor and aide student progress synchronously	*GlogsterEDU* interactive digital poster authoring tool subscription, computers, iPads.	• $99 for school account http://edu.glogster.com/product-information • Funding Source: ELA department funds	Teacher dashboard for published student work, graded by rubric as a culminating, authentic learning assessment.	Reading specialist and child study team (CST) who collect individualized, student analytics from *GlogsterEDU* dashboard. Increase of student to proficient on teacher-created project-based learning authentic assessments via rubric. PD training on UDL

							and GlogsterEDU best practices using reseources from http://www.udlcenter.org/resource_library
	5) Inclusive lesson planning that utilizes UDL standards	September 2015-June 2016	The Technology Coordinator, in conjunction with the computer science department staff.	Read Write Think, computers. http://www.readwritethink.org	• Free	Progress reports and printable rewards made available to the instructor	Increase of student writing to proficient using student and department-based assessments, as well as writing rubrics that are aligned to the PARCC Assessment. Supervisor will oversee logs of online training from Read Write Think – http://www.readwritethink.org/search/?resource_type=68

Action Plan—Special Education Technologies for ELA CCSS Reading

School:	**Principal:**	**Date Submitted**:

Section A –Describe your goal, target audience, and identify which need(s) the goal addresses. (Refer to prior data analysis regarding needs)

Goal #4	All students are assessed for reading abilities, whether it is formative or summative. Reading, and all that it entails—fluency, comprehension—can be hampered by a student's learning disabilities. The use of assistive and adaptive technology can aid students of all abilities to effectively prepare for college and career life (Dell, Newton, & Petroff, 2012).
Target Audience	Special education students in general education English language arts classes.
Identified Needs	Range of Reading and Level of Text Complexity: CCSS.ELA-LITERACY.RL.9-10.10 By the end of grade 9, read and comprehend literature, including stories, dramas, and poems, in the grades 9-10 text complexity band proficiently, with scaffolding as needed at the high end of the range. By the end of grade 10, read and comprehend literature, including stories, dramas, and poems, at the high end of the grades 9-10 text complexity band independently and proficiently.

Outcomes/ Objectives Section B- The outcomes must be measureable and directly aligned to Goal. <u>This outcome/objective must be one of your technology related outcomes/objectives from Project #4 for this Goal</u>	**ACTION STEPS** – Section C – Descriptively list the action to ensure progress toward your goal. Action steps are strategies and interventions, which should be research-based where possible and may *include professional development, technology, communication, and parent and community involvement initiatives within the action steps. (Use as many steps as you need for each Outcome)*	**IMPLEMENTATION INFORMATION** Section D– For each of the Action Steps you list, give timeline, person(s) responsible (for management, coordination and monitoring), required resources (infrastructure- services, physical and human resources),projected cost(s)/funding sources, evaluation data source with identified instrument/methodology, and principal strategies and responsibilities. (For Evaluation Strategy, define how you will evaluate the action step.)					
		Timeline (Begin-end date for each step)	Person Responsible for coordination and reporting	Required Resources (People, technology, furniture, etc.)	Estimated Projected Cost(s) & Funding Sources	Evaluation Data Source and Instruments used	Principal Strategies and Responsibilities to insure success
Outcome/Objective #1- IN THIS BOX – this outcome is only related to Goal 2, not Goal 1	1) Assistive Hardware that Support Common Core Reading Skills reading and phonemic awareness	September 2015-June 2016	Reading specialist, in-class special education co-teacher	*Starfall* subscription, computers.	• $270 for a school subscription http://more.starfall.com/info/educators.php#curriculum • Funding Source: Instructional	Formative assessments from the application	English language arts department supervisor, once per month, will review formative and summative assessments

					funds		in the application. Increase to student proficiency. Supervisor will lead regular PD training about resources, assessments, and *Starfall's* online community.
	2) Use of graphic organizers tied to content	September 2015-June 2016	Classroom teacher manages a virtual classroom and can monitor progress on video quizzes. Lessons and printable graphic organizers accompany content.	*BrainPOP* school subscription.	• $1,495 for a school subscription https://secure.brainpop.com/store/step2/?group_id=1 • Funding Source: Instructional funds, as well as grant funds suggested at: http://www.brainpop.com/funding/funding_main/	Real-time data provided by the *BrainPOP* Teacher Dashboard.	English language arts department supervisor, once per month, will review formative and summative teacher-based and department-based assessments. Increase to student proficiency. BrainPOP has PD training, including archived webinars, which can be logged for administrative use – http://www.brainpop.com/educators/community/training-main/

	3) Leveled reading for students with dyslexia	September 2015-June 2016	Special education and reading specialist choose the level of graphic novel, which ranges from "original text" to "plain text" to "quick text," depending on fluency.	*Classical Comics* Curriculum Set.	• Entire class sets are available, payable in British pounds via Paypal -- 30 graphic novels & Teaching Resource Book. £200.00 (about $300 US) http://www.classicalcomics.com/files/Ed_OrderForm.pdf • Funding Source: ELA and child-study team funds via Paypal	Assessments included with the Teacher Resources book for each classical graphic novel set.	English language arts department supervisor review of lesson plans and use of included assessment tools, once per month. Review formative and summative teacher-based and department-based assessments. Increase to student proficiency. ELA supervisor and reading will lead in-service PD on dyslexia.
	4) Personalized, adaptive reading for Common Core skills	September 2015-June 2016	Special education and reading specialist choose the level of reading (grades 4-12), depending on fluency. The site offers individualized student monitoring based on reading level (Lexile range of text density). It differentiates and tracks individual	*Reading Mate* subscription, computers.	• $7000 for 500 or more students http://www.edmentum.com/products-services/readingmate • Funding Source: Instructional funds, as well as Title I-IV grants: http://welcome.readingmate.com/funding-for-	It is a personalized learning reading platform. Built-in assessments scale up complexity based on assessments of individual reader. It is Common Core-linked.	English language arts department supervisor review of individual student analytics, once per month. English language arts department supervisor, once per month, will review formative and

			student progress.		schools.aspx		summative assessments in the application. Increase to student proficiency. ELA will lead monthly training on topics of Lexile ranges and differentiation using Reading Mate.
	5) Interventions for Common Core writing skills	September 2015-June 2016	Special education and reading specialist choose the level of reading (grades 4-12), depending on fluency.	*Istation* Reading, an adaptive, personalized platform http://www.istation.com subscription, computers.	• According to EdSurge (*Istation* quotes via school-by-school basis), an unlimited school account costs $6500 • Funding Source: Instructional funds, as well as federal grants	*Istation* provides a monthly computer-based personalized assessment via its *Istation* Indicators of Progress (ISIP) adaptive service	English language arts department supervisor review of individual student analytics, once per month. English language arts department supervisor, once per month, will review formative and summative assessments in the application. Increase to student proficiency. *Istation* houses PD videos and webinars, which teachers must

							watch and log – http://www.istation.com/Support/ProfDevVideos

Action Plan – English Language Learners (ELLs)							
School:		**Principal:**			**Date Submitted**:		
Section A –Describe your goal, target audience, and identify which need(s) the goal addresses. (Refer to prior data analysis regarding needs)							
Goal #5		Our goal is to blend technology into the English Language Learners instructional program to increase proficiency in basic social communication such as listening and speaking.					
Target Audience		English Language Learners in the alternative language program grades 6-8 (middle school).					
Identified Needs		This goal aligns with World-Class Instructional Design and Assessment : English Learners Proficiency Standards for Grades 6 through 12. ELP Standard 1: Social and Instructional Language Formative Framework.					
Outcomes/Objectives Section B- **The outcomes must be measureable and directly aligned to Goal. <u>This outcome/objective must be one of your technology related outcomes/objectives from Project #4 for this Goal</u>**	**ACTION STEPS** – Section C – Descriptively list the action to ensure progress toward your goal. Action steps are strategies and interventions which should be research-based where possible and may *include professional development, technology, communication, and parent and community involvement initiatives within the action steps.(Use as many steps as you need for each Outcome)*	**IMPLEMENTATION INFORMATION** Section D– For each of the Action Steps you list, give timeline, person(s) responsible (for management, coordination and monitoring), required resources (infrastructure- services, physical and human resources),projected cost(s)/funding sources, evaluation data source with identified instrument/methodology, and principal strategies and responsibilities. (For Evaluation Strategy, define how you will evaluate the action step.)					
		Timeline (begin-end date for each step)	Person Responsible for coordination and reporting – point person	Required Resources (People, technology, furniture, etc.)	Estimated Projected Cost(s) and Funding Sources	Evaluation Data Source and Instruments used	Principal's Strategies and Responsibilities to insure success for each step
Outcome/Objective #1- IN THIS BOX - this outcome is only related to Goal 1	1) Purchase and implement social language software for ELL students to interpret oral scenarios on character development. (Inspiration,SMART Notebook ,)	January 2015-June 2015	Supervisor of Instructional Technology Supervisor of Bilingual Department	Computers in each ELL classroom Software installed on each computer in ELL classroom Supervisor of	HP Computers $5,000.00 Inspiration Software $45.95/computer $49.95 x 40 = $1,998.00	Product Invoices Department minutes Completed inventory data table to insure all software is installed before the start of the school year. Software	Provide access to all ELL classrooms throughout the school year and summer. Supply a list of ELL classrooms in the building. Discuss the

				Instructional Technology Building Technology Specialists Supervisor of Bilingual Department Bilingual Teachers Reading Specialist Software: Inspiration SMART Notebook New Jersey CCCS WIDA Standards	SMART Notebook Package $127,000.00	aligns with the New Jersey CCCS Software aligns with WIDA Standards	implementation of the software Evaluate the pro's and con's of implementing the software into the program
	2) Create a bilingual curriculum which focuses on character development, social interaction, and the use of multiple technology resources.	March 2016-July 2016	Supervisor of Instructional Technology Supervisor of Bilingual Department	Computers in each ELL classroom Software installed on each ELL computer Supervisor of Instructional	Summer Stipend ($30/hour x 10 hours = $300 pp) $300 x 8 people = $2,400	Various curricular materials developed by the curriculum team. Department minutes Certificate for	Provide professional development time to create curriculum for bilingual teachers, Building Technology Specialists, and Reading specialists. Offer common planning time for all parties involved

				Technology Building Technology Specialists Supervisor of Bilingual Department ELL Teachers Reading Specialist New Jersey CCCS WIDA Standards Software: Inspiration SMART Notebook		professional development hours Curriculum alignment with New Jersey CCCS Curriculum alignment with WIDA Standards	Evaluate the new curriculum guide Knowledge of New Jersey CCCS Knowledge of WIDA Standards
	3) Provide professional development for grades 6-8 bilingual staff to learn new software and how to incorporate software in their teaching.	June 2015-September 2016	Supervisor of Instructional Technology Supervisor of Bilingual Department	Computers Supervisor of Instructional Technology Building Technology Specialists Supervisor of Bilingual	Summer Stipend ($30/hour x 25 hours = $750.00 pp) $750.00 x 8 people = $6,000	Professional development questionnaire assessment Certificate for professional development hours	Grant professional development time for ELL teachers, Building Technology Specialists, and Reading specialists. Hold meetings with Department Supervisors to stay abreast of curriculum and building changes

				Department ELL Teachers Reading Specialist New Jersey CCCS WIDA Standards Software: Inspiration SMART Notebook			
	4) Bilingual staff will assess the effectiveness of various new software technologies by monitoring student progress and completing a survey.	September 2015-June 2016	ELL Teachers Reading Specialists	ELL Teachers Reading Specialists Survey Monkey Computers SGO Assessments	Survey Monkey Account $780 per year	ELL Student Growth Objective (SGO) assessments, June 2016. Survey Monkey reports WIDA standards	Meet with the Bilingual Supervisor to discuss student growth in the area of social and instructional language Analyze statistical data Discuss the implementation of the software Meet with ELL teachers to access SGO scores Knowledge of New

							Jersey CCCS Knowledge of WIDA Standards

Action Plan – English Language Learners (ELLs)							
School:		**Principal:**			**Date Submitted**:		
Section A –Describe your goal, target audience, and identify which need(s) the goal addresses. (Refer to prior data analysis regarding needs)							
Goal #6		Our goal is to blend technology into the English Language Learners instructional program to increase proficiency in the language of science.					
Target Audience		English Language Learners in the alternative language program grades 6-8 (middle school).					
Identified Needs		This goal aligns with World-Class Instructional Design and Assessment: English Learners Proficiency Standards for Grades 6 through 12. ELP Standard 4: The Language of Science: Formative Framework					
Outcomes/Objectives Section B- **The outcomes must be measureable and directly aligned to Goal. <u>This outcome/objective must be one of your technology related outcomes/objectives from Project #4 for this Goal</u>**	**ACTION STEPS** – Section C – Descriptively list the action to ensure progress toward your goal. Action steps are strategies and interventions which should be research-based where possible and may *include professional development, technology, communication, and parent and community involvement initiatives within the action steps.(Use as many steps as you need for each Outcome)*	**IMPLEMENTATION INFORMATION** Section D– For each of the Action Steps you list, give timeline, person(s) responsible (for management, coordination and monitoring), required resources (infrastructure- services, physical and human resources),projected cost(s)/funding sources, evaluation data source with identified instrument/methodology, and principal strategies and responsibilities. (For Evaluation Strategy, define how you will evaluate the action step.)					
		Timeline (begin-end date for each step)	Person Responsible for coordination and reporting – point person	Required Resources (People, technology, furniture, etc.)	Estimated Projected Cost(s) and Funding Sources	Evaluation Data Source and Instruments used	Principal's Strategies and Responsibilities to insure success for each step
Outcome/Objective #1- IN THIS BOX - this outcome is only related to Goal 1	1) Wireless access points will be installed in all ELL classrooms by a contractor (Cisco SmartNet)	June 2015-August 2015	Supervisor of Instructional Technology Vendor: Cisco SmartNet (wireless telecommunications)	Computers in each ELL classroom Wireless access points installed in ELL classrooms Supervisor of Instructional	HP Computers $5,000 Cisco Smartnet $280,000	Product invoices Service invoices Completed inventory data table to insure all access points installed	Provide access to all ELL classrooms throughout the summer. Supply a list of ELL classrooms in the building. Discuss the

				Technology Building Technology Specialists Contract with Cisco SmartNet for all core networking		before the start of the school year.	implementation of wireless technology
	2) Identify a variety of science videos and virtual lab experiments on the web that provide visual descriptions of science terminology. (BrainPop, PhNET Online Interactive Simulations, Gizmos online Interactive Simulations)	March 2016-July 2016	Supervisor of Instructional Technology Supervisor of Bilingual Department	Computers in each ELL classroom Wireless access points installed in ELL classrooms BrainPop Supervisor of Instructional Technology Building Technology Specialists Supervisor of Bilingual Department ELL Teachers Reading Specialist	BrainPop $1,495 School Subscription Summer Stipend $30/hour x 25 hours = $750.00 pp $750.00 x 8 people = $6,000 PhNet Online Simulations Free	Various curricular materials developed by the curriculum team. Department minutes Certificate for professional development hours Curriculum alignment with Next Generation Science Standards Curriculum alignment with WIDA List of website	Provide professional development collaboration for bilingual teachers, Building Technology Specialists, and Reading specialists. Design a schedule for all parties in the building to meet with supervisors. Discuss the pro's and con's of simulation use in the classroom. Knowledge of Next Generation Science Standards Knowledge of WIDA Standards

						links and descriptions	
	3) Provide professional development for all bilingual staff for grades 6 through 8	June 2015-August 2015	Supervisor of Instructional Technology Supervisor of Bilingual Department	Computers SMARTBoard MOODLE Supervisor of Instructional Technology Building Technology Specialists Supervisor of Bilingual Department ELL Teachers Reading Specialist Next Generation Science Standards	Summer Stipend $30/hour x 25 hours = $750.00 pp $750.00 x 8 people = $6,000	Professional development questionnaire assessment Certificate for professional development hours	Grant professional development time for ELL teachers, Building Technology Specialists, and Reading specialists. Hold meetings with Department Supervisors to stay abreast of curriculum changes Design a schedule for all parties in the building to meet with supervisors.

				WIDA Standards			
	4) Use a Modular Object-Oriented Dynamic Learning Evironment (MOODLE) as a tool for students to use to describe general vocabulary associated with science concepts	September 2015-June 2016	ELL Teachers Reading Specialists	MOODLE ELL Teachers Reading Specialists Survey Monkey Computers SGO Assessments Next Generation Science Standards WIDA Standards	MOODLE Hardware & Software Package $372,942	ELL Student Growth Objective (SGO) assessments, June 2016. Survey Monkey reports WIDA standards are met Next Generation Science Standards are met	Meet with the Bilingual Supervisor to discuss student growth in the area of science language Analyze statistical data Discuss the implementation of virtual experiments Meet with ELL teachers to access SGO scores
	5) ELL staff will assess the effectiveness of online simulations by monitoring student progress and completing a survey	September 2015-June 2016	ELL Teachers Reading Specialists	ELL Teachers Reading Specialists Survey Monkey Computers SGO Assessments	Survey Monkey Account $780 per year	ELL Student Growth Objective (SGO) assessments, June 2016. Survey Monkey reports WIDA standards are met	Meet with the Bilingual Supervisor to discuss student growth in science language Analyze statistical data Discuss the

						Next Generation Science Standards are met	implementation of the internet video's and simulations Meet with ELL teachers to access SGO scores Discuss the pro's and con's of simulation use in the classroom

Action Plan – At Risk Students

School:	**Principal:**	**Date Submitted**:

Section A –Describe your goal, target audience, and identify which need(s) the goal addresses. (Refer to prior data analysis regarding needs)

Goal #7	The technology plan will prepare Grades 3-5 At-Risk students with Word Processing and Keyboarding Skills in conjunction with the 2014 New Jersey Core Content Technology Standards with the assistance of a research-based digital literacy program. The goal is to have at least 75% of the 3-5 grade students attain a score of 75% or higher according to the Student Growth Objectives Form.
Target Audience	K-5 At- Risk Students in the Library Media/Technology Center.
Identified Needs	2014 New Jersey Core Content Technology Standards 8.1 All students will use digital tools to access, mange, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge. Results of Student Growth Objective indicates average score on Word Processing and Keyboarding Skills Pre-Assessments ranged from 5% to 60%.

Outcomes/Objectives Section B- **The outcomes must be measureable and directly aligned to Goal. <u>This outcome/objective must be one of your technology related outcomes/objectives from Project #4 for this Goal</u>**	**ACTION STEPS** – Section C – Descriptively list the action to ensure progress toward your goal. Action steps are strategies and interventions which should be research-based where possible and may *include professional development, technology, communication, and parent and community involvement initiatives within the action steps.(Use as many steps as you need for each Outcome)*	**IMPLEMENTATION INFORMATION** Section D– For each of the Action Steps you list, give timeline, person(s) responsible (for management, coordination and monitoring), required resources (infrastructure- services, physical and human resources),projected cost(s)/funding sources, evaluation data source with identified instrument/methodology, and principal strategies and responsibilities. (For Evaluation Strategy, define how you will evaluate the action step.)					
		Timeline (begin-end date for each step)	Person Responsible for coordination and reporting – point person	Required Resources (People, technology, furniture, etc.)	Estimated Projected Cost(s) and Funding Sources	Evaluation Data Source and Instruments used	Principal's Strategies and Responsibilities to insure success for each step
Action Plan Procedures	1) Districtwide In-service Training Reading Teachers and Library Media Specialist Learning.com web-based program to support PARCC testing and promote technology	September, December 2015 February, March 2016	Director of Technology/ Learning.Com Training Representative	Computer Lab with Internet Connection Learning.com software dl in system Districtwide Library Media Specialist	$44,080.00 from District Wide Technology Department	Program provides an assessments which includes results from pre and post - test measured by a project's	Principal will provide schedule for the Library Media Specialist to utilize the computer lab.

	literacy			Grades k-5		grading rubrics.	
	2) Library Media Specialist K-5 attend Mavis Beacon web-based program Staff Development Workshop Mavis Beacon Program provide skills and promote technology literacy to prepare students for the PARCC testing	September and October 2015	Director of Technology Technology Coach School Leadership Council Committee (Principal, Teachers, Support Staff, Students, Parents, and Community)	Districtwide Library Media Specialist Grades k-5 Computer Lab with Internet Connection Mavis Beacon Program downloaded on computers. Technology Coach to assist in creating class roster for program.	Quantity 25 Houghton Mifflin-Mavis Beacon Flex License Parts# 3434334 $30.00 each Extended Price $750.00 from School Based Budget	Program provides standardized performance results	Principal will provide schedule for the Library Media Specialist to utilize the computer lab. Principal will allocate funding in budget to purchase program.
	3) Library Media Specialist Grades K-5 attend Kidspiration 3.0 software training workshop to learn Kidspiration Program uses visual thinking methodologies for the k-5 student.	September 2015 2 -1 hour sessions Staff meeting	Director of Technology Technology Coach School Leadership Council Committee (Principal, Teachers, Support Staff, Students, Parents, and Community	Districtwide Library Media Specialist Grades k-5	Kidspiration 3.0 software 100-499 user level Quantity 25 $26.00 each Extended Price $650.00 from School Based Budget	Program comes equipped with individual assessment feature	Principal will provide schedule for the Library Media Specialist to utilize the computer lab. Principal will allocate funding in budget to purchase program.

Action Plan – At Risk Students

School:	**Principal:**	**Date Submitted**:

Section A –Describe your goal, target audience, and identify which need(s) the goal addresses. (Refer to prior data analysis regarding needs)

Goal #8	The technology plan will prepare K-5 At-Risk students with the English Language Arts Skills in conjunction with the Common Core State Standards with the assistance of a research-based technology literacy program.
Target Audience	K-12 At- Risk Students in a General Education classroom setting.
Identified Needs	The At-Risk Students according to the Common Core State Standards English/Language Arts-Literacy.RL.5.10 addresses reading and comprehending literature, including stories, dramas, and poetry at the end of grades 4-5 text complexity band independently and proficiently.

Outcomes/Objectives Section B- **The outcomes must be measureable and directly aligned to Goal. <u>This outcome/objective must be one of your technology related outcomes/objectives from Project #4 for this Goal</u>**	**ACTION STEPS** – Section C – Descriptively list the action to ensure progress toward your goal. Action steps are strategies and interventions which should be research-based where possible and may *include professional development, technology, communication, and parent and community involvement initiatives within the action steps. (Use as many steps as you need for each Outcome)*	**IMPLEMENTATION INFORMATION** Section D– For each of the Action Steps you list, give timeline, person(s) responsible (for management, coordination and monitoring), required resources (infrastructure- services, physical and human resources),projected cost(s)/funding sources, evaluation data source with identified instrument/methodology, and principal strategies and responsibilities. (For Evaluation Strategy, define how you will evaluate the action step.)					
		Timeline (begin-end date for each step)	Person Responsible for coordination and reporting	Required Resources (People, technology, furniture, etc.)	Estimated Projected Cost(s) & Funding Sources	Evaluation Data Source and Instruments used	Principal Strategies and Responsibilities to insure success
Action Plan Procedures	1) OnCourse Systems Classroom teachers will collaborate and share lesson plans aligned to the standards.	September 2015	Director of Technology/ Technology Coach	20 Computers in Lab with Internet to access OnCourse Systems.	OnCourse Systems for Education $38,000 from District Wide Technology Department	Weekly comments provided by the administrator	Principal will provide schedule for the library media specialist to utilize the computer lab.
	2) Read 180 and System 44 Training for one reading teacher per 3-5 grade level	August 2015 5 days 4 hrs. per day	Director of Technology Technology Coach	Grades 3-5 6 Computer with headsets with microphones 6 CD players	$55,000 from District Wide Technology Department the purchase of the	Program comes equipped with individual assessment	Principal will provide schedule for the library media

					program 4 teachers $37.00 per 20 hrs Total $740.00	feature	specialist to utilize the computer lab. Random walk through to observe how students are utilizing the program
	4) Smartboard Exchange Resources and Usage of Smart Responders Professional Training Sessions for Grades K-5	September 2015	Technology Coach or Library Media Specialist with Smartboard Certification	1 Smarboard per class or computers in lab with Internet to access SmartBoard by the classroom teachers	Free membership to join	Comprehensive usage data base available to support student achievement	Principal will provide schedule for the classroom teacher to utilize the computer lab. Principal will allocate funding in budget to purchase research-base program. Random walk through to observe how students are utilizing the program
	5) Worldbook Online Resources e-books to be utilize at school or home by teachers, students, and parents Teacher attend workshop bases on Tech Card,	September 2015-August 2016	Technology Coordinator	20 Computers in Lab with Internet to access OnCourse Systems	$814.00 Online Children's Edition Diff Pkg Yearly from School Based Budget	Comprehensive usage data base available to support student achievement	Principal will provide schedule for the classroom teacher to utilize the computer lab. Principal will allocate funding in budget to purchase subscription.

	6) Tittlewave/Follett Library Resources e-books to be utilize at school or home by teachers, students, and parents	September 2015	Tech support via phone teachers, students, and parents	20 Computers in Lab with Internet to access e-Books	226 e-books $3,966.21 from School Based Budget	Comprehensive usage data base available to support student achievement	Principal will provide schedule for the classroom teacher to utilize the computer lab. Principal will allocate funding in budget to purchase e-books.
	7) Waterford Early Learning Program for Grades K-2 Features 360 digital books to foster high order thinking skill	September 2015	Technology Director Technology Coach Teachers K-2	20 Computers in Lab with Internet to access e-Books	$15,000.00 for 150 students.	Program comes equipped with individual assessment feature	Principal will provide schedule for the classroom teacher to utilize the computer lab. Random walk through to observe how students are utilizing the program

Action Plan Template Adapted from Shelby County Schools, Tennessee
(http://www.scsk12.org/SCS/elementary/Germantown_Elem/School_Improvement_Plan_files/Action%20Plan%20Development.pdf)

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