



## **The 21<sup>st</sup> Century Classroom: Creating a Culture of Innovation in ICT**

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### **Abstract**

*The use of educational technology in Information and Communications Technology (ICT) for language learning has been and continues to be at the forefront of best practices as educators strive to build a culture that fosters innovation and revolutionizes the classroom experience. We are increasingly aware that education is at a critical juncture and vital for workforce development and economic prosperity (West, 2013). School leaders are now being recognized for their ability to showcase expanded and creative technology, building momentum to support educators who recognize that the power of technology implementation goes beyond use “to enhance instruction” and holds the potential to change education. The increasing role of technology has impacted the learning environment and challenged educators to change teaching and learning in their classrooms as they develop strategic objectives capitalizing on the technologies that work best for varying scenarios.*

*Classrooms in the 21<sup>st</sup> century are undergoing a rapid transformation into innovative learning environments that are connected, flexible, and collaborative. This paper features a showcase of best practices that hold a number of opportunities for specific and practical academic pursuits. Implemented in ICT, they are recognized as innovative and showing promise in building momentum for digital teaching and learning in 21<sup>st</sup> century classrooms.*

### **Introduction**

To be effective, educators have a responsibility to explore and incorporate digital tools in ICT. West Ada School District in the State of Idaho, USA, has been a leader in the use of educational technology and ICT since the advent of personal computing. As digital tools began to be used in classrooms in the USA, West Ada embraced them as tools to change teaching and learning. 21<sup>st</sup> century classrooms designed by creative educators are featured showcasing the integration of digital devices where educators have a commitment to create a “rotational” model of instruction. The innovation and change is about the teaching and learning process itself. Through the use of digital devices students are actively engaged in their learning and are working on meaningful, real-world projects in which they apply their learning. An observer in these classrooms no longer sees a teacher who is “a sage on the stage” nor does he/she observe students working on low level, rote kinds of learning. Rather, one observes students working at the evaluation, analysis, and synthesis levels of learning with the teacher acting as facilitator in classrooms designed and equipped for this innovative model of instruction. Extensive professional development and support linked to training resources for a number of different devices is offered to classroom teachers for their use of technology to enhance instruction. Workshops, courses for credit, online instruction and a robust website filled with supports are provided. In addition, the district holds quarterly events to showcase teacher and student efforts, and the capstone of learning/sharing is an annual “tech expo” where students show off their work and the tools used to create it. An overview of digital tools for ICT and best practices are discussed that allow educators to leverage their new ideas and demonstrate the breadth of quality as they change their approach to teaching, transform the classroom experience and boost learning outcomes.

### **Fostering innovation and revolutionizing the classroom experience**

The world is changing at a rapid pace and the expectation is that education must seize the opportunity to keep up with the increasing demands for students to possess the ability to succeed in the global information age by creating and analyzing information transforming it and demonstrating effective interaction and relationships with others. 21<sup>st</sup> century classrooms can no longer look and feel like the traditional classrooms of the past and whether these classrooms are settings in our public schools or



online digital classrooms, students will be required to be actively engaged in learning utilizing a variety of resources, not limited to technology but applying technology to engage with team members pursuing innovation and productive work in partnerships and teams. Members of the Partnership for 21<sup>st</sup> Century Skills have defined the paramount importance of change and the need for improving student achievement at all levels. The Partnership for 21<sup>st</sup> Century Skills is a unique public-private organization formed in 2002 to create a successful model of learning for this millennium that incorporates 21<sup>st</sup> century skills into our system of education. They are focused on bridging the gap between how students live and learn and have compiled a list of six key elements crucial for 21<sup>st</sup> century learning. These elements are:

Emphasize core subjects

Emphasize learning skills

Use 21<sup>st</sup> century tools to develop learning skills

Teach and learn in a 21<sup>st</sup> century context

Teach and learn in 21<sup>st</sup> century content

Use 21<sup>st</sup> century assessments that measure 21<sup>st</sup> century skills

([http://www.p21.org/storage/documents/P21\\_Report.pdf](http://www.p21.org/storage/documents/P21_Report.pdf))

Throughout the United States, educational leaders are engaged in numerous collaborative endeavors to aggressively pursue opportunities to improve 21<sup>st</sup> century education and create a compelling inspirational vision for the acquisition of critical knowledge in future of education.

## **Transforming the classroom experience and boosting learning outcomes**

Knowledgeable educators capable of integrating complex roles and dispositions in the service of diverse communities of learners are tantamount to the success of students. These reflective practitioners are instrumental in transforming the classroom in complex settings and boosting learning outcomes. In West Ada School District at Discovery Elementary School in Meridian, Idaho, first graders are experimenting with new classroom technology as the school district led by Superintendent Linda Clark is building a district culture to foster innovation. This classroom and others like it throughout the district are providing real life laboratories in which students are taking increasingly greater responsibility for their own learning. Careful planning of methodology and assessment linked to focused and specific goals is synonymous with transforming the 21<sup>st</sup> century classroom. Proficiency in assessing dynamic instructional models is essential for measuring the end goal of what this innovative curriculum is designed to achieve. Best practices that hold a number of opportunities for teaching and learning in the 21<sup>st</sup> century classroom focus on changing the nature of instruction. The classroom setting has evolved exploring the best of rich scenarios to redefine instruction and pursue the best of inspiring technology encounters. An engaging classroom experience combines cutting edge technology and a classroom designed to implement technology enabled learning. Simply adding technologies is not sufficient to address the changing nature of instruction (Clemmons, 2013). The learning environment needs to be flexible to inform best practices and classroom spaces redesigned to support active learning environments. It is understandable that this does not come without considerable investment of resources. The physical space within the traditional classroom must be redesigned and dedicated to embrace instructional models focusing on digication and interactive learning. Remarkable transformation includes addressing the challenges associated with global engagement and the addition of interactive technology. Classrooms can be reconfigured for flexible instructional environments. Furniture and equipment that is easily moved for changing class settings is preferred. Clemmons (2013) suggests that the entirety of the physical space must be considered to maximize the effectiveness of modern instructional models. A solid infrastructure focused on rapidly evolving technological skills and beneficial properties underscores the highest standards of new horizons in innovation. Initially the costs associated with this transition are substantial yet the days of students lugging backpacks full of textbooks are ending. I pads, software, and on line resources certainly have utility for the future.

An impressive example is found in the 21<sup>st</sup> century classrooms in West Ada School District where select educators are successfully contributing to the implementation of new learning environments. Classroom methods incorporate a variety of learner-centered technologies supporting inquiry based learning. Self-directed learning strategies are tailored to encourage independent as well as collaborative learning enhanced by teamwork, proficiency and mastery in the content area. West Ada School District focused on building a culture of innovation and 21<sup>st</sup> century classrooms are characterized by active student



engagement, collaborative work on real world problems that require high levels of thought and application, the use of multiple types of digital tools, and a redefinition of the teacher as facilitator of learning. Building momentum to support educators who recognize the power of technology implementation sparks a bright future and contributes to educators' successful contribution to a productive environment in the 21<sup>st</sup> century classroom. Best practices that hold a number of opportunities for teaching and learning require expertise as new horizons in innovation are explored and developed. Developing strategies that will be successful in teaching and learning and effectively engage students will require professional development. In West Ada School District, professional development strategies for the 21<sup>st</sup> century classroom include workshops, university classes for credit, online learning, and the development of a robust web site to provide training, support, and extended learning. The district also utilizes digital content coaches who work shoulder-to-shoulder with teachers in the classroom (Ash, 2013).

## Allowing educators to leverage their new ideas

Initiatives to drive innovation and technology are showcased in West Ada Schools to allow educators to feature and celebrate their students' invigorating and captivating accomplishments as they display impressive gains in innovation and leverage their creative ideas. Best practices that hold a number of opportunities for teaching and learning in the 21<sup>st</sup> century classroom are showcased to enrich and redefine the remarkable results achieved in the classroom. An example of this in West Ada School District is the quarterly showcases that are held to highlight the projects that have received district grant funding. In an effort to build momentum from "the bottom up" the district initially identified five classroom teachers who had begun to change teaching and learning in their classrooms with digital devices. These teachers were asked how they would change their classrooms, if they could start from the ground up. Each presented a detailed plan that included new furniture, digital devices and a commitment to create a "rotational" model of instruction. This plan has gained momentum and expanded, and in the fall of 2014, the district will have five elementary schools with all classrooms equipped. In addition, there are approximately 80 classrooms throughout the district that have embraced the model and are fully equipped.

## Conclusion

The capacity and technology that results in a digital learning environment extends far beyond the traditional classroom. According to Dr. Linda Clark, Superintendent of West Ada School District, "These are the seeds from which widespread innovation will grow." In summary, innovative ICT practices are crucial for success in the transformation of the 21<sup>st</sup> century classroom in the new millennium as students and educators pursue their goals and embrace the demands of our rapidly evolving and expanding global society. Supportive and collaborative relationships among teachers and educational leaders are the key to success. Technology and global engagement provide an opportunity to develop a sphere of interculturality and explore a myriad of unrivaled and dynamic learning techniques. This leads to an ever changing classroom with learning experiences yet to be explored. By combining expertise with innovation in collaborative settings led by dedicated educators, students will thrive on their invigorating journey in the 21<sup>st</sup> century classroom heralding a bright future for education in the digital age.

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