Curriculum Advances Student's Dual-Language Science Literacy

Texas A&M

Researchers at The Center for Research & Development in Dual Language & Literacy Acquisition (CRDLLA) in the College of Education and Human Development at Texas A&M University have developed and licensed a new dual-language education and science literacy curriculum, Storytelling and Retelling and Higher-Order Thinking for English Language and Literacy Acquisition (STELLA).

STELLA offers carefully selected child-centered, personal learning experiences with diverse literature to build strong academic vocabulary and oral and written language skills for kindergarten through third-grade students. Teachers are first trained, then use the program materials with students in the classroom. It is used by many schools in Texas, and CRDLLA is introducing it to schools across the globe. STELLA is offered in English and Spanish, with Mandarin and Arabic versions in development.

Typically subjects like English and science are taught separately. STELLA's curriculum is designed to use story to engage learners in higher-order thinking to promote language development. The integration of directed maker spaces and 21st-centrury entrepreneurial skills ties creative aspects together that are not always represented in other language development curriculum. Moving beyond a focus only on subject-specific language development or storytelling is innovative as it brings the two curriculum focuses together in one design.

"This curriculum has been developed through multiple grants over the years, so we know it works in terms of dual-language education and science literacy. This program starts to build the base of scientific language, which is something that children need because if they don't have these building blocks, later they cannot access higher education because they don't have the technical language," said Matthew J. Etchells, the Center's Director of Education Outreach, Marketing and Communications.

Texas A&M University Innovation Partners, a commercialization office within the Texas A&M System located in College Station, Texas, recently licensed STELLA to Frog Street Press, LLC, an early childhood education publisher. The licensing agreement protects the material and gives the College of Education profits that will help them continue research, invest in further curriculum development, and support student and staff employment.

"Without identifiable intellectual property, there would be no way for the College of Education and Human Development and A&M overall to have a revenue source to continue their research," said Senior Licensing Manager for Innovation Partners Bobby Melvin. "The commercialization office was able to identify the existing intellectual property and put it in a form that could then be licensed to someone else. With that protection, the license then becomes valuable, because are the only ones who can put this online for other users."

Innovation Partners works with several different schools and inventors at Texas A&M University to help with copyrighting material and licensing. Daniel Odenweller, a licensing services coordinator with Innovation Partners, worked with CRDLLA on the licensing of STELLA to Frog Street.

"We have resources to help inventors and PI's take their research and realize the different aspects that are marketable and the different parts that are protected under intellectual property law," said Odenweller. "[But] my favorite part of this project was working with the people who created STELLA. The STELLA team brought a passion we love to see from inventors and innovators and were energetic in our discussions on licensing and copyrights, a subject that some find rather dry."

Without Innovation Partners, the licensing agreement would have never been accomplished, Etchells said.

"Having someone like Daniel [Odenweller] and Bob [Melvin] come in and help us to framework, understand and navigate the system was amazing. It was like having a tour guide to a license," said Etchells.

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