

Search4STEM  
John and Mary Lighthouse, Parents  
A User Case

John and Mary Lighthouse are parents of a set of twins in the middle school of the town of Hickory, a suburb of one of nation's largest cities. She is a stay-at-home mother and a pro bono tutor in the schools. He is the CEO of a large multinational technology company.

They have observed their twins' interest in school flagging and they are worried. They know all the statistics about STEM and its importance to the future of the nation's economy and they feel the school is not making enough progress to meet the state STEM plan's objectives.

They decide to develop a multifaceted campaign that incorporates their knowledge base and networks. John commissions a marketing person in his company to create an attractive series of activities to show middle school youngsters what STEM is all about and what its benefits are as well as who engages in STEM as a profession. These activities, once assembled, can be offered during and after school time.

Mary pulls together all the statistics she downloads from a site maintained by a small STEM consulting company. She then speaks with the principal to confirm what the school already offers in STEM, secure his opinion what he thinks should be done. He is delighted to hear of the Lighthouses' interest and support and joins with them in the initiative. He has long been worried that the school is not emphasizing STEM enough. With his encouragement, she then calls for a meeting of the School Council which has state-mandated responsibilities and which she co-chairs.

Both Mary and John know that in addition to all the *pro bono* work they are doing, there will need to be public money to support whatever they decided to propose. At the meeting of the Council, John and Mary present all the information they have gathered. Within the first hour of the meeting, all the parents are on board and they ask "What programs shall we institute?" Mary quickly projects on to the screen a source she has explored before.

Aptly named "Search4STEM" the site opens with a welcoming screen which describes how to use the system. A page then appears which requests personal/professional information about Mary which will inform and tailor any search in the future. It asks for a description of her role, her academic background and why she is interested in STEM. The query asks for what she is exploring at this time...There are many elements she can check off: grade levels for the intervention, STEM subject(s), description of elements (for example, whether the program is hands-on, project based, teacher centered, only web based, hybrid, etc.), contact information, evaluation information, cost and testimony from previous users. Videos of STEM professionals describing their careers and preparation are also available...She demonstrates an example by selecting engineering for grade 7.

The Council members are excited and agree to explore the site and the possibilities themselves. They set a date to meet again to develop an action plan.