

# Business Model Canvas: Adapting the Standardized Test

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## Abstract:

When students arrive to school ready for their day, they arrive only to remember they have a standardized test. What first started as a great day, quickly turned into a dreaded experience. Standardized testing typically brings many emotions to both teachers and students. Not only do the emotions become overwhelming, educators become worried that the scores their student receive will impact them in a negative way, especially when teacher evaluations are up for continuing contracts. Teachers everywhere put in an enormous amount of effort to encourage each of their students to do their best in each question they are tasked with. They also develop mindfulness techniques to showcase that taking a test is not a scary activity to participate in and that they all have put in a lot of effort to learn the material.

Here lies the problem: how can educators give students a standardized test where a one size fits all test is made for all learners? Educators everywhere already know that each of their students are individual and they retain information at different rates. How can educators be okay with giving their students a test when it is not encouraged to differentiate for their students when they all do that in their day to day?

The product that will be discussed below takes the above into consideration. By collaborating with test creators, there can be a common ground and there can be a developed new test that allows for adaptive technology to be implemented within the tests so students can get their actual baseline data and educators can use their data to better assist them in their foundational skills.

From spelling tests to math tests, students are constantly being tested. While some tests consist of lower stakes, others are held at a significantly higher level. The standardized test comes with a degree of stress, focus, and confusion as students progress through their academic careers. To develop a standardized test that is adaptive to meeting students where they are, will give educators and school districts a deeper understanding on how to better instruct their students given the data they receive.

## Customer Segments:

Customer Segment	Examples	Persona Links
K-12 Public School Districts (customers, niche market)	<ul style="list-style-type: none"><li>Principals</li><li>Assistant Principals</li><li>Superintendents</li></ul>	<a href="#">Middle School Principal</a>
K-12 Public School Teachers (users, niche market)	<ul style="list-style-type: none"><li>General education teachers in Elementary school, Middle school, and High school</li><li>Special education teachers</li></ul>	<a href="#">General Education Elementary School Teacher Persona</a>
Standardized Test Creators (users, niche market)	<ul style="list-style-type: none"><li>Developers</li><li>Adaptive learning specialists</li></ul>	<a href="#">Standardized Test Company Owner Persona</a>

K-12 Public School Students (users, niche market)	<ul style="list-style-type: none"> <li>• Elementary school students</li> <li>• Middle school students</li> <li>• High school students</li> <li>• Students receiving special services (IEP/504)</li> </ul>	<a href="#">Middle School Student</a>
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**Value Proposition:**

*K-12 Public School Districts:*

Districts all want to be able to showcase an increase in student achievement and closing the gap. In order to do so, they need a product that will help them get to this point. This adaptive test will help **performance** for improving the efficiency of the tests the students will have to take, thus increasing student scores and highlighting the districts commitment to the students. It will also develop its **brand/status** because word will spread that the districts will favor actual data that will benefit every student involved, which, in turn, will attract teachers to work for them and developing their district to be student-centered.

*K-12 Public School Teachers:*

Teachers who are in the public-school sector are constantly dreading the standardized testing season. The entire year is essentially dedicated to these tests as students have to take them three times a year, twice for state purposes and once for progress monitoring. Teachers know the struggles students face and see them stress about doing well each time the tests come around. By utilizing an adaptive standardized test, teachers can have **risk reduction** knowing that the test is giving their students an actual representation of what they know and where they can improve. It will give them a piece of mind that the product is working to better suit each learners needs. The adaptive test will also give them **performance** because their students will increase their scores and have a better understanding on how to best help their students in areas of need.

*Standardized Test Creators:*

The people dedicated to designing this adaptive test will have a focus on **customization**. They will be developing a test that changes questions for students taking the exam based on their knowledge and skills. They will adapt it to increase or decrease in level, depending on how the students will answer. In order to create this, they will take the regularly developed exams and design a branching system to develop this adaptive response to students' responses. They will also present with **getting the job done** by supporting districts in their quest to close the achievement gap.

*K-12 Public School Students:*

No student wants to take a standardized test. They have preconceived notions of the exams and are constantly in a state of stress, especially when the exams present with material the students have not learned yet within the school year or given questions for the grade level above where they currently are. They will have **performance** proposition because when they are told that the exam adapts to how they answer, they will understand that if it seems difficult, they know not to panic because the exam will benefit their performance and alter the questions. In doing so, the adaptive test will decrease the nervousness the typical tests bring out in students.

## **Channels:**

\*For Customer Segments consisting of K-12 Public School Districts, K-12 Public School Teachers, and Standardized Test Creators (K-12 students are required to take the exams, adaptive or not)

### *Get:*

In order to get these customers to be interested in an adaptive test, the product will be showcased with professional development conferences. They will be able to showcase the exam in a light that will be enticing and educators would be able to ask questions that will help them fully understand the distinction of adaptive standardized testing. The districts, especially superintendents who go to conferences will **acquire** the knowledge behind the adaptive tests and give them the opportunity to dive deeper in the piloting process.

### *Keep:*

To keep everyone interested in the adaptive test, the districts, educators, and superintendents will be sent **product updates** that develop the tests even further by demonstrating better ways to implement practice problems so students can get accustomed to a different kind of testing. By doing so, educators will be able to get additional practice problems for their students, districts and superintendents will be able to know that their educators are more willing to spend time on the exams without feeling like they are teaching for the exam.

### *Grow:*

For the customer segments to take the adaptive standardized testing and continue to utilize this form of testing, those developing the exams will be able to **next-sell**. In doing so they can offer districts an opportunity to purchase the exams for a full three years and the fourth year they get a 50% discount on the next two years of tests. They will also get **referrals** because districts and teachers all talk. They will be able to tell neighboring educators and districts how amazing the adaptive tests have been for their school and their students. This will attract other districts to look into purchasing this kind of adaptive test.

## **Customer Relationships:**

\*For Customer Segments consisting of K-12 Public School Districts, K-12 Public School Teachers, and Standardized Test Creators (K-12 students are required to take the exams, adaptive or not)

### *Get – Co-Creation:*

In order to get districts, teachers, and administration on board with an adaptive test, this product will allow for educators to co-create the exam. They will want to get real-time answers and questions from the educators using this product with their students. They will also want to get educators to help develop these as teachers are the ones who are in the trenches of standardized testing.

### *Keep – Personal Assistance:*

Having someone to speak to when questions arise is incredibly important, especially for a new product like an adaptive test. There will be questions that will occur and having someone to walk an educator through the process will only keep them using this product, especially when the person on the other end is helpful and patient.

*Grow – Communities:*

The product will allow school districts, administration, and educators to be part of a community where they can discuss how the product can be improved, questions they may have when going into it for the first time, and how the outcomes can help get more people, like parents, on board with the new design. The developers of the adaptive test will then be able to introduce new aspects or even change and update the product as they continue to monitor these communities, as well as invite the community members to help pilot other opportunities that will be developed.

**Revenue Streams:**

	Unit Cost	Q1	Q2	Q3	Q4
<b>Asset Sale:</b> Developers will sell the exams to districts at a low cost in the first quarter. As they begin to gain traction and attention, the goal is to increase sales significantly.	\$250	20 tests	40 tests	90 tests	250 tests
<i>Total</i>		\$5,000	\$10,000	\$22,500	\$62,500
<b>Licensing:</b> Developers will allow districts to buy the license to distribute the exams over the course of a year, three times a year.	\$300	20 tests	40 tests	90 tests	250 tests
<i>Total</i>		\$6,000	\$12,000	\$27,000	\$75,000
<b>Advertisements:</b> In order for the exams to take off in districts, the developers will use ads to gain traction. They will have these in professional development conferences, advertise in certain curricula when new items are shipped, and in mail to districts in the surrounding areas.	\$4,000	10 advertisements	15 advertisements	20 advertisements	25 advertisements
<i>Total</i>		\$40,000	\$60,000	\$80,000	\$100,000

<i>Grand Total</i>		\$51,000	\$82,000	\$129,500	\$237,500
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## **Key Resources:**

### *Physical:*

- A building for the developers to work in and create the adaptive exams.
- Computers to work through the adaptive portion and branching the questions.
- Testing computers so users can work on the computers that have the setup for the adaptive component.

### *Intellectual:*

- Student information based on their demographics, test scores, and data.
- Patent for the adaptive nature of the exams.
- Tests that are developed are copyrighted.

### *Human:*

- Software developers
- Learning analytics researchers
- Educators

### *Financial:*

- Money from donors
- State funding to help further develop this adaptive resource
- District funding to order the tests and give educators a stipend to work alongside the developers

## **Key Activities:**

*Production:* There will need to be sufficient funding and people to develop the items needed to create an adaptive test.

*Physical Places of Business:* There will need to be a homebase to house the people and equipment while they are developing the items. There will also have to be enough space to house guests to come in and hear about the adaptive nature as well as a space for educators to come in and meet with the developers to discuss the main features and any questions or concerns they might have.

*Problem Solving:* When working with technology, there are going to be issues that arise. The possibility of a coding issue when developing the adaptivity, the release and signing on to the tests on student computers may not function properly. They will have people to work through these problems and figure out ways to solve or eliminate them.

## **Key Partners:**

*User Testers:* There will be educators and students who will be piloting the adaptive nature of the exams. They will provide feedback to the developers and the educators can help give more

details in how to branch out the problems in a certain direction. They will be given the exams to look over and issue to students and then deliver real-time data to the developers.

*Donors:* There will be organizations that will provide funding for these tests so students can have better access to standardized testing. Educational advocate donors would want to help close the achievement gap. When hearing about the adaptive ability, they will want to help school districts who may not have money allocated to trying this kind of test.

**Cost Structure:**

<b>One-Time/Startup Cost</b>	<b>Costs</b>
Computers	\$ 50,000
Adaptive Software	\$ 30,000
<b>Fixed Costs</b>	
Utilities for building, yearly cost	\$ 6,000
Rent for building, yearly cost	\$ 3,500
Stipend for educators, average cost for 25 educators	\$ 25,00
<b>Variable Costs for first year</b>	
Advertisements	\$ 50,000
<b>Total</b>	<b>\$ 164,500</b>

**The Unanswered:**

The first unanswered component of this type of technology would be if it is sustainable in the first year, maybe even the second year. While it would be obtaining revenue, it is almost half of the revenue is the cost to develop the technology. One way to fix this would be to buy a building, so rent would not become an issue. Another way to fix the sustainment of the venture would be to reduce the number of advertisements. While the advertisements are the main source of revenue, the more educators use it and word of mouth takes over, the less the advertisements would be needed.

Second, the buy in from the communities the districts are located will need to be persuade. For many areas, especially low socioeconomic areas, there is a sense of unimportance when it comes to testing, especially when families know that their child is taking an exam that does not cater to their needs. One way to provide a solution to this is to have an open house of sorts to invite parents to hear about the adaptive technology. They can give their questions and get answers from a developer representative.