

InetSoft Case Study Assembly SMS

Company Profile/Overview

Assembly is a web-based School Management System designed in New Zealand for New Zealand schools. It was released to schools in 2010 and offers an integrated solution for a number of services that schools need - student data management, accounts receivable, planning and assessment, Ministry of Education requirements, pastoral care, attendance, behavioral management, powerful reporting, just to name a few. The technology behind Assembly ensures fast and secure access to all users. Users of Assembly experience an intuitive system that is easy to learn and requires minimal training for its core functions.

Problem/Challenge

Assembly was using Jasper Reports to provide schools with some basic administrative reports, but this did not cover all of their needs. They found Jasper to be particularly inadequate in the production of what they call "caregiver reports," reports individually produced for each student's caregiver, summarizing the various aspects of each student's achievement over a period of time. As these reports are generated individually for every student, most reporting solutions could not produce the needed number of them (over 50,000 reports in total at peak times of the school year) without a lengthy process involving all changes and modifications made by developers, instead of office staff.

In order to produce the caregiver reports efficiently, Assembly needed a reporting solution with which they could create a master report and put a data report underneath it. They also wanted to integrate this caregiver reporting with administrative reporting and data visualization for analysis of student data. At the time, Assembly had deployed some dashboards through a different solution, but wanted to create a student management system that integrated reporting with analytic dashboards.

An Assembly SMS Student Performance Dashboard





Dashboards, Reporting & Mashups

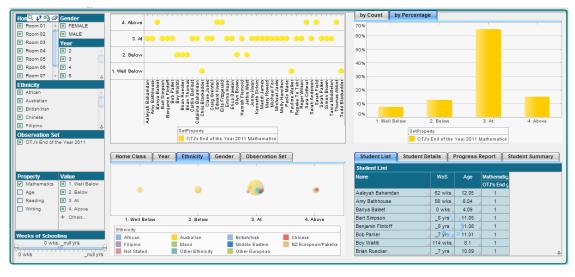
Solution/Requirement

Assembly found that only through InetSoft's robust Data Block and report template technology could the caregiver reports be produced easily and efficiently. Out of four solutions that Assembly evaluated deeply, InetSoft's offering was also the only software that could efficiently and effectively meet all three of their essential needs; caregiver reporting, data visualizations, and administrative reporting. Because of this, Assembly decided to use InetSoft's Style Intelligence to create its current student management reporting system. This system is accessible via a website through which teachers and administrators can log in to run both interactive dashboards and printable reports.

Assembly has white-labeled Style Intelligence, creating a unique user web portal with a branded look that is completely distinct from the look of the InetSoft product. The Assembly site features both an administrative site and a student hub, each with unique looks and features. School administrators use the website to deploy reports for tasks such as measuring accounts receivables, attendance reporting, producing labels, and general reports on student demographics. Teachers run caregiver reports for parents, assessment reports, and also find patterns in student achievement through interactive dashboards.

Student Progress Dashboards from Assembly SMS







Dashboards, Reporting & Mashups

Customer Value

Each of Assembly's schools use different styles of reports, and this diversity is well managed by the reusable queries enabled by InetSoft's data worksheet. While some schools run reports as long as eight pages with multiple entries, others may only be one page with a few entries. Some include graphics while some do not. Assembly uses the same queries for each school, queries that hold any and all of the data that schools may want to use in each report. Working off of these shared queries, it can take as little as two hours for Assembly to create new report templates that meet the needs of each school. With over 100 different styles of the caregiver reports alone, the flexibility of InetSoft's reporting engine comes in handy.

Assembly's student management system gives the individual schools quite a bit of flexibility in the deployment of these reports. Assembly creates the initial report templates, many with parameter sheets, which enable administrators to choose which fields from the report template to include in the reports that they are running. Caregiver reports are designed differently and have a different look for each school.

Given the sensitivity of student data, security is an obvious concern for Assembly's customers. InetSoft's enterprise manager structure makes it very easy for Assembly to effectively separate the data and reports of different schools through security permissions, ensuring that each school, administrator, and teacher only accesses the data, reports, and dashboards that they have specifically been given permission for.

Assembly's web-based platform is especially an advantage for teachers, who can run their caregiver reports on a web browser from their classroom, or any other locations, without having Style Intelligence or any kind of software installed on their desktop. Through Style Intelligence, Assembly was able to seamlessly integrate their dashboarding and reporting offerings in a way that was not previously possible. This is particularly useful, since schools analyze student data, but also have to submit reports to the school board and the Ministry of Education. Assembly's portals include reports linked with embedded interactive dashboards, so that educators can both explore their data visually and report their findings in publishable formats.

Assembly SMS Online Portal for Teachers ASMS . Q Sei 2013-01-24 Afternoon 2013-01-29 Settings Brian Ruecke Year 1 c 1 Year 1 2 3 4 5 > Year 2 Brian Rueck 1/08/2013 0 8/4/2013 11/4/2013 Fred Wills 0 Teacher Observation 4/5/2013 Year 3 5/6/2013 8/9/2013 Mr. Philip Matthews



Dashboards, Reporting & Mashups

"The more we worked with visualizations, the more we realized just how powerful they were and how much more schools could get out of their data by using them," explains Jan Gunn, General Manager at Assembly. One of the most useful types of visualizations available for teachers is the student assessment dashboard. Students take various assessments throughout their time at school, some focused on certain skills, but mostly on curriculum objectives. Dashboards can both display and filter assessment achievement by student, score, home class, gender, and ethnic group.



The performance of Maori students (the Maori are an indigenous people of New Zealand) is an important measure in New Zealand's educational system, so many of the dashboards have a button which compares Maori verses non-Maori students on assessment scores and other metrics. Dashboards can also be run for the achievement of individual students, tracking metrics such as assessment scores and reading ages over each year level through which the student has progressed. This enables teachers to instantly get a picture of how the student has been developing through their whole time at school.

"The ability to interactively view and interrogate student's data and progress over time enables teachers to make informed decisions to enhance teaching and learning," explains Barb Dysart, Deputy Principal at Sunnynook Primary School. "Assembly is an excellent asset to our school management."

Thanks to InetSoft's mobile functionality, teachers and administrators can run reports and explore student dashboards from tablets and mobile devices, making it easier for faculty to explore and share educational insights at any time. Assembly is also currently looking to extend its offering beyond teachers and administrators. They are in the process of creating a web-based student hub for parents, offering access to assessment scores and caregiver reports.

Schools are especially finding the dashboard interactivity offered by Assembly to be very useful. The ability to easily drill down into the data provides insights that would previously require running and looking through many different reports. Teachers and administrators have also been enjoying the edit functionality that InetSoft powered dashboards enable. Assembly even offers personalized webinars that instruct non-technical users on how to change chart styles and data bindings on dashboards. This kind of flexibility in student data exploration has been receiving positive notice from the schools as well as educational bodies.

Customer Recommendation

"We've demonstrated some of the visualizations for the Ministry of Education of New Zealand, and they are very impressed with the way that our platform allows educators to interact with student data," Jan explains. "They have expressed that they would like to see a lot of other educational platforms providing similar functionality. However, at the moment, none of our competitors are providing visualizations the same way that we do."

