## Data-Driven Education Management

Attention to all report creators who are eager to enhance their portfolio and elevate their Power BI proficiency! The FP20 Analytics Challenge #13 presents a genuine real-life use-case along with the dataset.

We're excited to introduce Fort Vermilion School Division as our data partner for this month's challenge.

The Fort Vermilion School Division (FVSD) is a governmental organization responsible for overseeing schools in the northwestern corner of Alberta, Canada. FVSD is renowned for their commitment to data-driven planning and decision-making to empower every student with equal opportunities and care in education.

This challenge invites participants to delve deep into educational data and assisting the School Division with strategic planning for assessments, comprehending student performance, and determining the necessary teacher resources for future enhancements.

**About**

The FP20 Analytics Challenge 13 is brought to you in collaboration with ZoomCharts. Thanks to this partnership, we're integrating ZoomCharts' exceptional Power BI solution into this competition to enrich your skill in creating excellent reports that help business users explore data quickly and intuitively.

To participate in the challenge with ZoomCharts [register here](https://zoomcharts.com/en/microsoft-power-bi-custom-visuals/challenges/fp20analytics-january-2024?utm_source=challenge&utm_medium=fp20analytics&utm_campaign=fp20analytics_web_january&utm_term=register&utm_content=registration) and create a Power BI report including at least 2 ZoomCharts Drill Down Visuals in one report page

**Why participate in the ZoomCharts Challenge?**

1. **Receive a free license**  
   Upon signing up for the challenge, you will receive a FREE Drill Down Visuals Developers License that lets you access the full Drill Down Visuals PRO library.  
   This license remains active for a year after the last challenge you take part in. Meaning, you can access the latest advanced data visualization tools to enhance your projects for a full year.
2. **Personalized feedback ️**  
   Our team sends personalized feedback to EVERY report entry. This gives all participants the chance to hone their skills and adjust their report, giving them an extra competitive edge in the challenge.
3. **Learning resources**   
   Participants receive all the latest information on upcoming workshops and events, demonstrating how our team of proven professionals approach visualizing the given dataset for the challenge.  
   You also have the chance to book 1:1 calls with a Power BI mentor who will analyze and give specific suggestions to improve your report.
4. **The main prize**   
   Last but not least, entering the challenge with ZoomCharts puts you in the running for an additional $300 Amazon gift card!

**Introduction**

Below is your show time. Read me carefully!

**Timeline**

The challenge will run from Wednesday the 17th of January 2024 at 15:00 pm UK time and ends on Thursday the 15th of February 2024 at 11:59 pm UK time.

**Tools**

All tools permitted.

**ZoomCharts entries:**

Create a Power BI report including at least 2 ZoomCharts Drill Down Visuals in one report page!  
  
**Access to the LinkedIn Group and Forum**

**https://www.linkedin.com/groups/12751070/**  
  
**NovyPro:**  
**https://www.novypro.com/**  
  
**Instructions Video:**  
**https://www.youtube.com/watch?v=jkcAYgFGWUY**

**Brief**

**Important – Background information**

The school year is split into 3 semesters (Fall, Winter and Spring). Each student is assessed each semester using three test (assessment) types - TOSREC, TOWRE and TOSWRF - using standard score system. For each test there is a known associated cost per student.

Based on the received score, students are split into groups indicating they performance level. Two types of grouping are used: 1) assessment level (very poor, at risk, good etc.) 2) assessment level grouping (below average or average and above). Students with poor test results are required to take additional classes (Intervention groups), where each group contains 5 or 10 students depending on the test score, and require additional teacher resources.

**Questions:**

Create a report that allows end users to easily find answers to the following questions:

1. Total number of students per each *assessment level* broken down by:
   * Semester (Fall, Winter, & Spring)
   * School Year
   * School
2. Total number of students per each *assessment level group* broken down by
   * Semester (Fall, Winter, & Spring)
   * School Year
   * School
3. % of students (calculated from the total number of students) per each *assessment level* broken down by:
   * Semester (Fall, Winter, & Spring)
   * School Year
   * School
4. % of students (calculated from the total number of students) per each *assessment level group* broken down by
   * Semester (Fall, Winter, & Spring)
   * School Year
   * School
5. Students Assessments between 80 and 90 Standard Score in each period go into an Intervention Group (Tier 2). This Group contains 10 Students that requires one Teacher. How Many teachers will we require for these Intervention Groups in Winter of 2023 / 2024 based on 2023 / 2024 Fall Results.
6. Students Assessments below 80 Standard Score in each period go into an Intervention Group (Tier 3). This Group contains 5 Students that requires one Teacher. How Many teachers will we require for these Intervention Groups in Winter of 2023 / 2024 based on 2023 / 2024 Fall Results.
7. What are projected testing costs for Winter of 2023 / 2024 based on 2023 / 2024 Fall results?

Optional: (Division in school years and semesters doesn't follow the traditional logic of Calendar year, and Same Period Last year calculations, and can be very complex to solve. Therefore, for these exercises we have prepared a date calendar in the model that takes into account the semesters and the yearly split of school years. So please pay attention to the values that are provided)

1. Change in the total number of students per each assessment level when compared to previous semester ((fall, winter, or spring))\*
2. Change in the total number of students per each assessment level when compared to the same semester in the previous school year ( e.g. fall 2023 and fall 2022))\*
3. % change in number of students per each assessment level when compared to previous semester ((fall, winter, or spring))\*
4. % change in number of students per each assessment level when compared to the same semester in the previous school year ( e.g. fall 2023 and fall 2022))\*
5. Showcase the average score trend throughout the years / semesters

Tip:

This information can be displayed in separate charts or in drill down levels.

#### **Technical Requirements**

* Reports are restricted to a maximum of two pages.
* Canvas size is 16:9 (Default Power BI size) or Full HD size = w:1920 - h:1080.
* For ZoomCharts Challenge: create a Power BI report including at least 2 ZoomCharts Drill Down Visuals in one report page.

##### **Judging Criteria**

Business users use reports to make data-driven decisions. That’s why reports are called effective if they enable users to drill down and filter data quickly and intuitively to find answers to any question they might have and analyse data in all possible directions and dimensions. We will evaluate:

**1) How easy is it to understand the data? (max 10 points)**

* Is too much text used for explanation?
* Are the indicative colors in charts instinctually understandable?
* Does it tell a story?

**2) How easy-to-use is the report? (max 14 points)**

* Cross-chart filtering implementation across the report. Can other visuals provide relevant data as the user explores the rep
* Response time
* Drill Down: multi-layer data exploration. Can the user drill down and gain additional insights within the report?
* Use of tutorial overlays and other elements to assist new users. Can a new user start using this report straight away with just the guidance provided within the report itself?

**3) How good is the report design and is it suitable for its purpose? (max 10 points)**

* Visual design: is the overall look consistent, no empty spaces, no overcrowding?
* Interface design: are there unnecessary visualisations/buttons/complexity in use?
* UX design: is the produced report usable?
* Report design: is the main challenge answered?
* Technical: are all the fonts used the same, are the sizes readable?

You are encouraged to use various techniques at your disposal, such as tooltips, drill-throughs, drill-downs, cross-chart filtering and page navigation features, to enhance your analysis.

### **The Resources.**

1. Excel Spreadsheet with dataset and .pbix file with data model.

2. PDF with the Intro and Brief in English.

3. PDF with the Intro and Brief in Spanish.

### **Zoomcharts Resources.**

Resources that will inspire you to master Power BI reports that end-users will love:

1. [Use-Case Gallery](https://zoomcharts.com/en/microsoft-power-bi-custom-visuals/dashboard-and-report-examples/?utm_source=challenge&utm_medium=fp20analytics&utm_campaign=fp20analytics_web_january_2024&utm_term=resources&utm_content=use-case_gallery): Try live demos and download reports made by the ZoomCharts team

2. [Video tutorials](https://academy.zoomcharts.com/?utm_source=challenge&utm_medium=fp20analytics&utm_campaign=fp20analytics_web_january_2024&utm_term=resources&utm_content=video_tutorials): Watch engaging video guides on how to set up and use the visuals

3. [Documentation](https://zoomcharts.com/en/microsoft-power-bi-custom-visuals/documentation/general/getting-started/?utm_source=challenge&utm_medium=fp20analytics&utm_campaign=fp20analytics_web_january_2024&utm_term=resources&utm_content=documentation): Technical deep-dive about ZoomCharts visuals

4. [ZoomCharts Blog](https://zoomcharts.com/en/microsoft-power-bi-custom-visuals/blog/?utm_source=challenge&utm_medium=fp20analytics&utm_campaign=fp20analytics_web_january_2024&utm_term=resources&utm_content=blog): Useful tips & tricks for data visualization and report creation

5.[Visuals Gallery](https://zoomcharts.com/en/microsoft-power-bi-custom-visuals/gallery/?utm_source=challenge&utm_medium=fp20analytics&utm_campaign=fp20analytics_web_january_2024&utm_term=resources&utm_content=visuals_gallery): Explore all the possible customization options for Drill Down Visuals.

### **Submissions of Entries.**

**\*IMPORTANT\***

To submit your two-page report, please follow these steps, if you want to be considered for the Zoomcharts' prize, otherwise post your entry in the challenges group.

### **1.**[**Submit your entry .pbix file here.**](https://zoomcharts.com/en/microsoft-power-bi-custom-visuals/challenges/fp20analytics-january-2024?utm_source=challenge&utm_medium=fp20analytics&utm_campaign=fp20analytics_web_january&utm_term=register&utm_content=registration) Your report will undergo validation to ensure it meets all the technical requirements. If the report is validated, you will receive a 'Publish to Web' link. If it does not meet the requirements, you will receive a rejection reason and will have the opportunity to resubmit your report.

### **2. Post your submission on LinkedIn:**

1. Upload the report as a PDF document on your LinkedIn feed.

2. Use the caption "I am participating in FP20 Analytics Challenge 13”, along with screenshots from your report.

3. Include a summary of your report's key insights and publish it to the web or NovyPro link.

4. Use the hashtags #FP20Analytics, #FP20AnalyticsEducationAnalysis, #builtwithzoomcharts, tag @Federico Pastor and @Zoomcharts.

5. Additionally, post your report in the FP20 Analytics LinkedIn Community Group.

### **Dataset.**

### **Click on the link below to get your dataset: The files contain all the necessary data and information to create your report.**

### [**Dataset**](https://assets.zyrosite.com/dOqX1Rko21iyeZB8/xmas_dataset_c12-m7VMX43LJNTkGVpy.xlsx) [**Intro & Brief in English**](https://assets.zyrosite.com/dOqX1Rko21iyeZB8/intro-brief-c12-mk3yKOvq0zU9rXeE.docx) [**Intro & Brief Español**](https://assets.zyrosite.com/dOqX1Rko21iyeZB8/intro-brief-c12_spanish-Y4L8XQD0yzFGNGvX.docx)

\*Any questions, please post them in the challenges group; a member of the team will get back to you ASAP. Please do not send challenge questions via private messages to the members of the team, these will not be answered.