# OLAYINKA OLAOLUWA - COURSE REVENUE REPORT

Contents

## BUSINESS TASK

Educative is an online academia platform that publishes online course in for major subjects Business Finance, Web development, Graphic Design and Musical Instruments.

The Data analytic department has been tasked by the organization, Educative to find opportunities to increase sales and track performances. Already, there is a suggestion to use the Web development courses to increase the sales. Our findings will reveal if this strategy should be accepted or not.

These findings have been collated into this report and excel worksheet and a Power Bi dashboard.

## DATA PREPARATION

The data that has been collected for this mining is in four files (by their subjects). Imported and combined using the Excel software, we have in total 3677 observations and 11 variables. However, 2 additional columns have been created to aid our analysis:

- course_id          -unique ID for each course
- course_title       -title for the courses
- price              -price for each course; 0s are for free courses.
- num_subscribers    -number of people who subscribed for the course.
- num_reviews        -number of people who reviewed the course.
- num_lectures           -the number of lectures in one course
- level              -the level of expertise of the course published.
- Rating             -subscriber rating of courses
- content_duration   -how long each course last
- published_date     -date the course was published
- subject                -categories each course fall in.
- Free_Paid          -if course is free or paid
- Revenue            -price multiplied by number of subscribers

No duplicates were found, renamed some subjects in the subject column (where "subject: web development), ratings were rounded up to 2 decimal places, changed 'Published_ timeline' to published date

## EXPLORATORY DATA ANALYSIS- Refer to Worksheet for answers
To track our performance as tasked we did some EDA to answer few questions

1. What are the top 20 courses with the highest number of subscribers?
2. How many courses were published every year by the four subjects we offer (Business Finance, Graphic Design, Musical Instruments, Web Development)?
3. How much Revenue do we make every year?
4. What are the average number of subscribers each subject has?
5. What is the proportion of free and paid courses by subject?
6. Total number of courses published for each level, revenue and average price?
7. Is there a correlation between subscription between duration, price and rating?
8. Average number of course produce every year.

## FINDINGS
To answer the question of finding opportunities to increase revenue, we will be focusing on 3 factors; Subjects, Levels and Titles.

### Revenue generated by subject from 2011-2017

| Row Labels | Sum of Revenue |
|---|---|
| **Business Finance** | **123735315** |
| All Levels | 69837715 |
| Beginner Level | 35578315 |
| Expert Level | 2709565 |
| Intermediate Level | 15609720 |
| **Graphic Design** | **76983170** |
| All Levels | 52388850 |
| Beginner Level | 18592325 |
| Expert Level | 164210 |
| Intermediate Level | 5837785 |
| **Musical Instruments** | **53359055** |
| All Levels | 23031730 |
| Beginner Level | 25429895 |
| Expert Level | 793505 |
| Intermediate Level | 4103925 |
| **Web Development** | **631082465** |
| All Levels | 294407915 |
| Beginner Level | 262545635 |
| Expert Level | 4943475 |
| Intermediate Level | 69185440 |
| **Grand Total** | **885160005** |
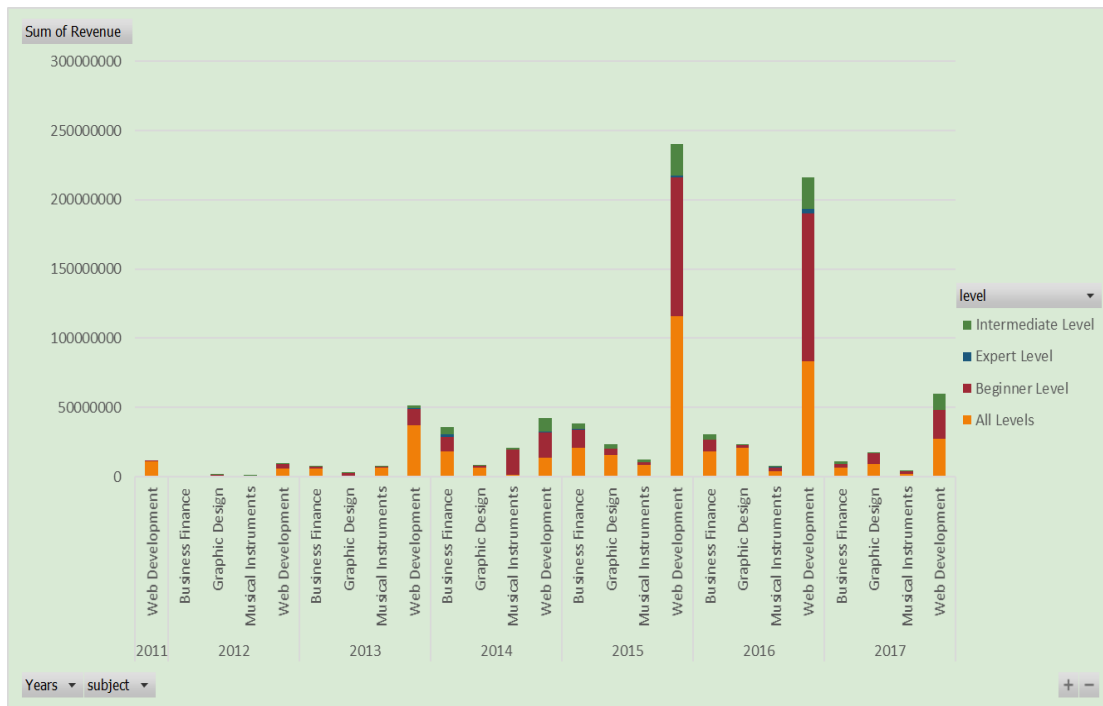
Currently, Courses under web development generates most revenue especially courses meant for all-levels and beginner levels followed by the business finance subject.

The decrease we see in 2017 is due to the fact that our data collected ended in the middle of the year the same for 2011.

To leverage these findings for opportunities to increase revenue, more courses should be published under Web development and business finance. Also, we can make free or discount most courses in the other subjects to boost their patronage.

**Number of course published across subjects**

Also, it could be that the revenue generated from each subject is dependent on the number of courses published under each subject. Therefore, if we publish more of these courses to at least the average number of the entire courses published, we will generate more from these subjects. As shown in the chart below, the total number of subscribers in each of these subjects is greater than the total average.
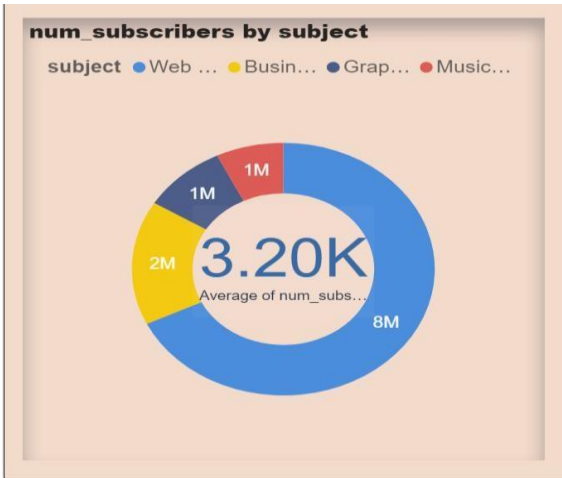


**Revenue by Levels**
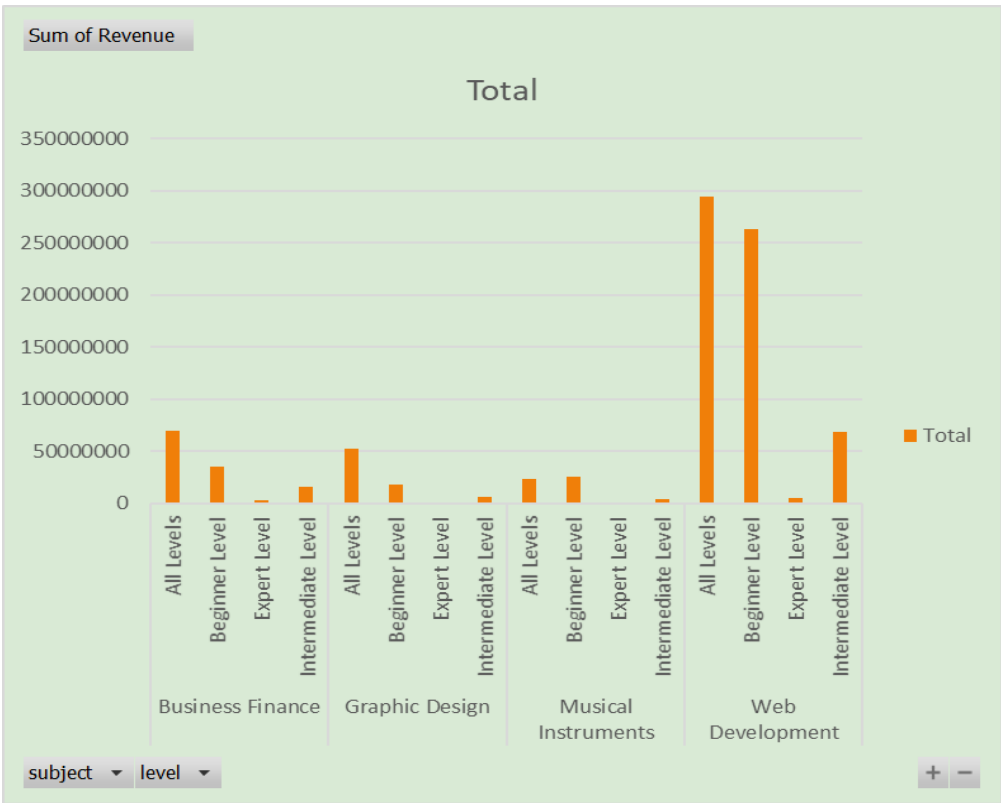
Across all subjects, all_levels and beginner courses sell the most. These can be considered when publishing new courses.

**Revenue by Title**

We took a look at the most sold courses titles;



| course_title | subject | Revenue ▼ | num_subscribers | Free_Paid |
|---|---|---|---|---|
| the-web-developer-bootcamp | Web Development | 24316800 | 121584 | Paid |
| the-complete-web-developer-course-2 | Web Development | 22902400 | 114512 | Paid |
| pianoforall-incredible-new-way-to-learn-piano-keyboard | Musical Instruments | 15099800 | 75499 | Paid |
| the-complete-guide-to-angular-2 | Web Development | 14018770 | 73783 | Paid |
| understand-javascript | Web Development | 13932100 | 79612 | Paid |
| understand-nodejs | Web Development | 11350560 | 58208 | Paid |
| learn-angularjs | Web Development | 10388175 | 59361 | Paid |
| react-redux | Web Development | 9146700 | 50815 | Paid |
| design-and-develop-a-killer-website-with-html5-and-css3 | Web Development | 8575515 | 43977 | Paid |
| angular-2-tutorial-for-beginners | Web Development | 6010500 | 40070 | Paid |
| **Total** | | **135741320** | **717421** | |

Most of these titles is about learning a programming language. More research into programming languages that are needed should be done to enable us publish courses that cater for them.

## CONCLUSION

These findings are recommendations generated by fact limited to the dataset we worked with. When other factors like discounts, locations etc. are being considered, new findings should be generated