Sentiment Analysis of MST Nepal and its Competitors

Komal Niraula

<u>Overview</u>

- This report analyses the sentiment of user reviews for EdTech platforms of Nepal on Play Store. It is based on the data collected on July 3, 2023.

- The scope of the work includes comparing the reviews of mySeccondTeacher with three competitors.

- The findings of the report highlights the strengths and weaknesses of EdTech platforms.

Data Summary

	My Second Teacher	MIDAS E-CLASS	MERO School	neema academy
Downloads	10k+	100k+	100k+	10k+
Average rating	4.2	3.9	4.5	4.2
Total review comments	112	673	295	216
Average rating from review commenters	2.9	4.0	3.5	4.25

Word Cloud

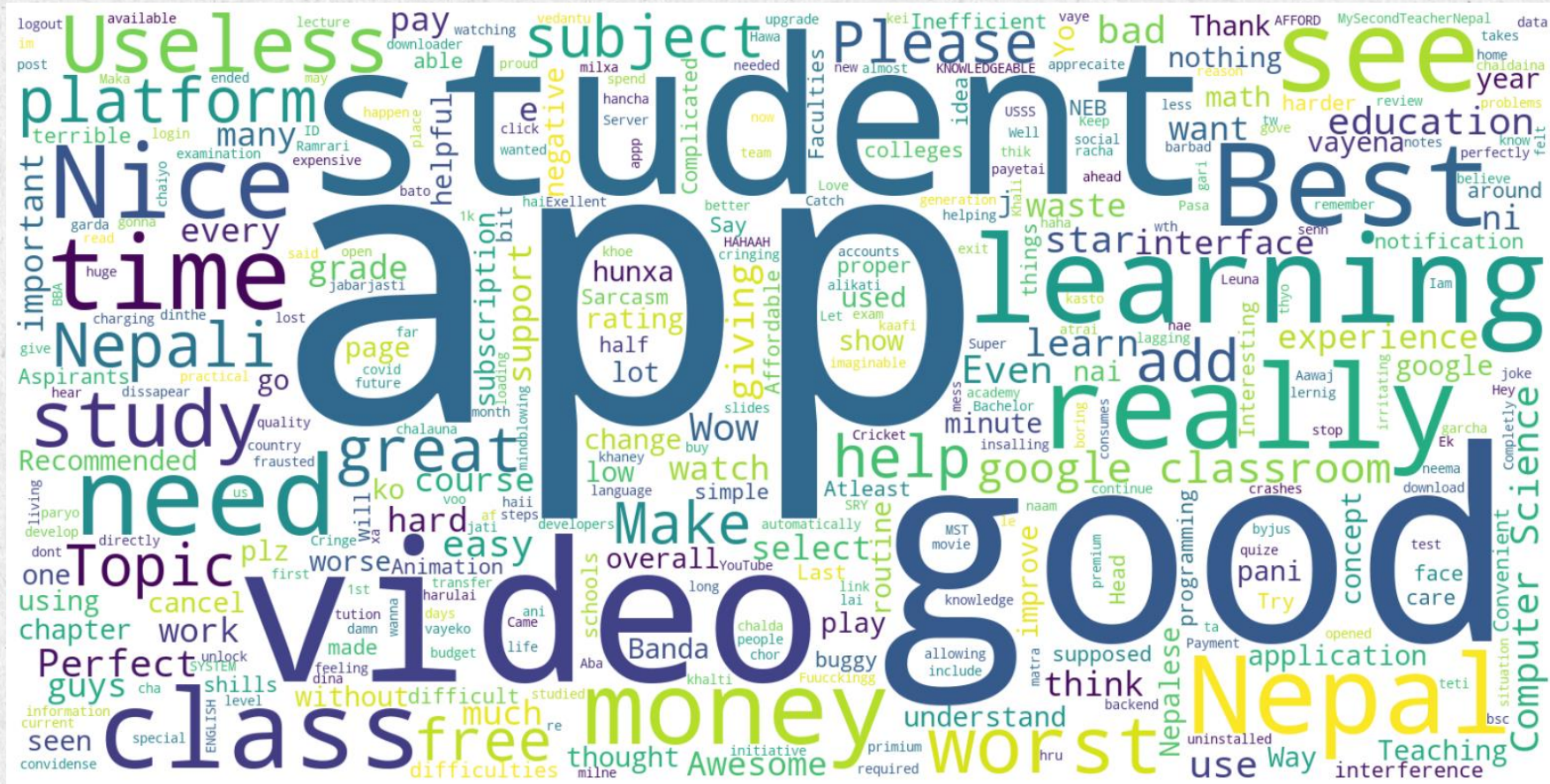*Bigger and bolder words are mentioned often in the reviews

Fig: Word cloud of mySecondTeacher app reviews

Word Cloud

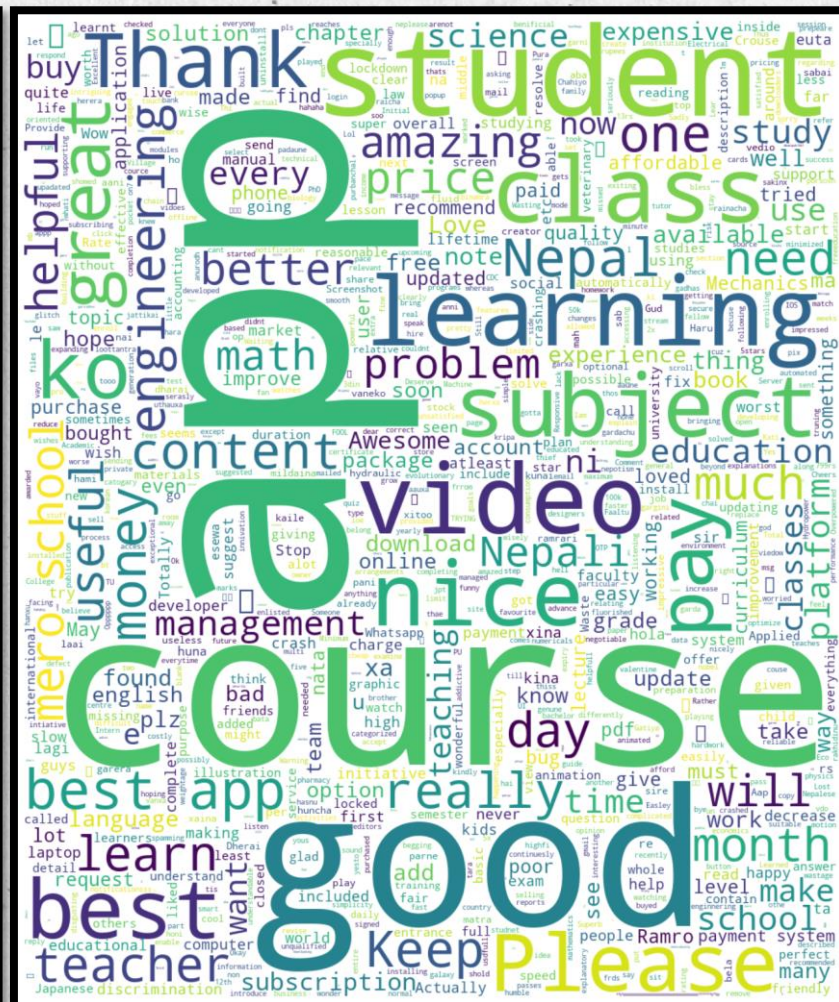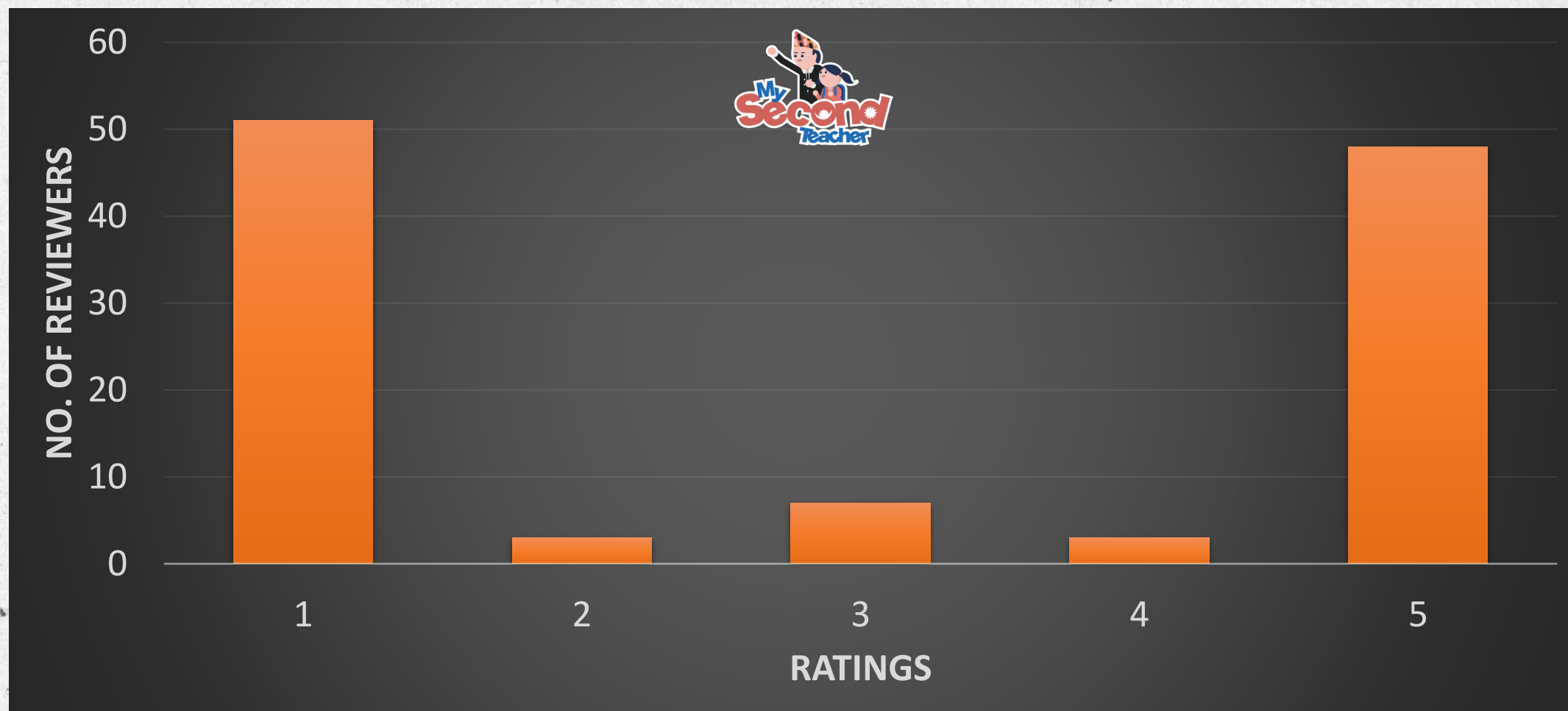Fig: Word cloud of MiDas eCLASS app reviews

Fig: Word cloud of Mero School app reviews

Fig: Word cloud of Neema Academy app reviews

Ratings from reviewers
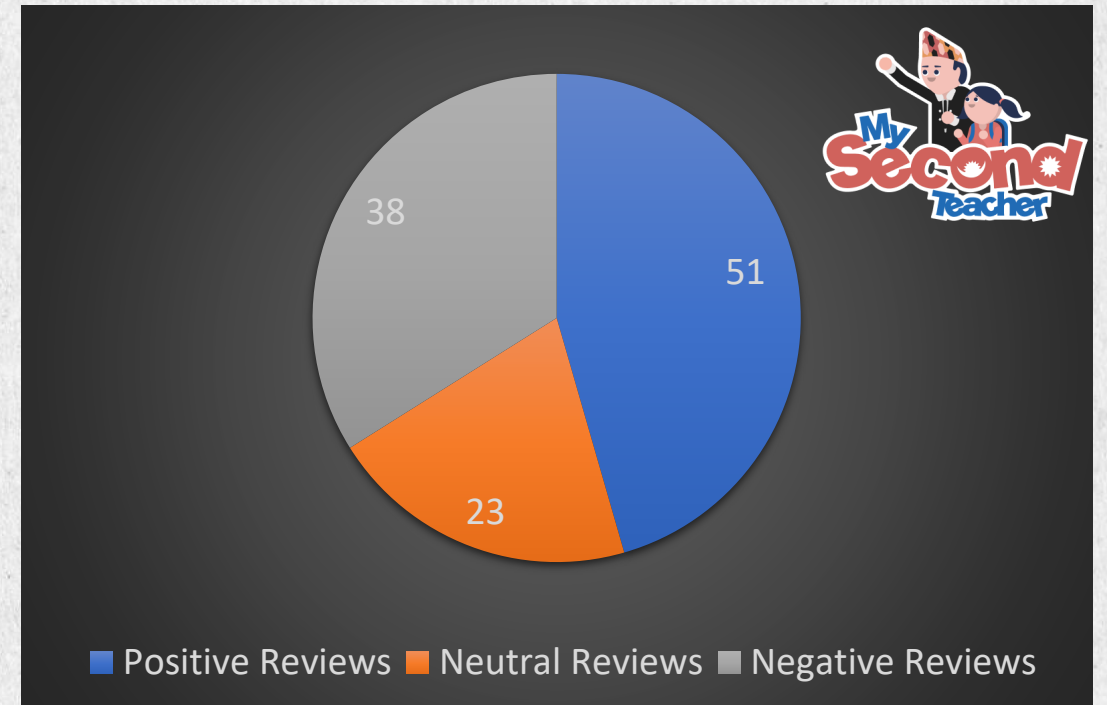
Comparing ratings from reviewers
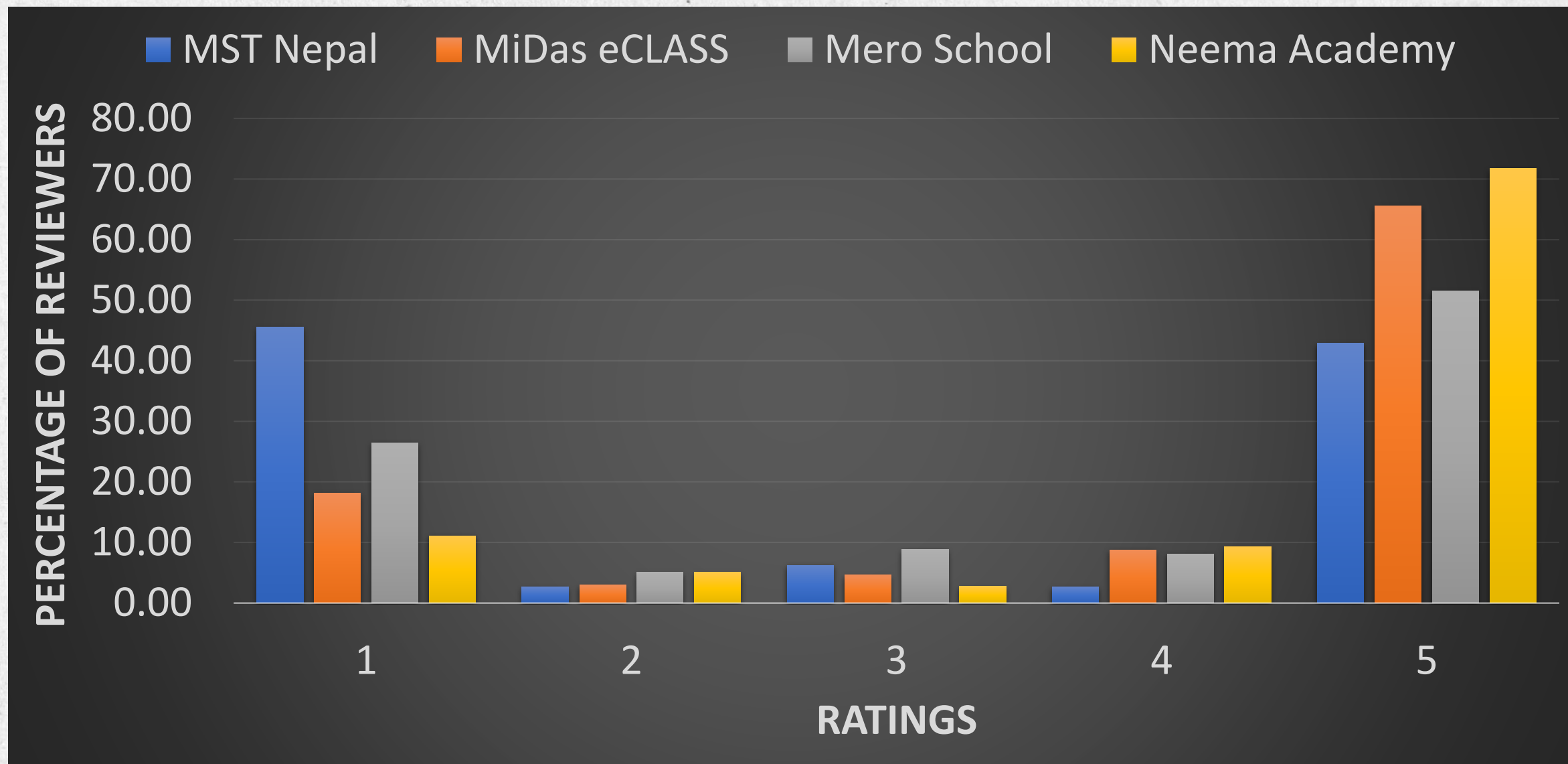
Reviews sentiment

- The reviews are classified as positive, negative, and neutral using RoBERTa, a transformer based language model.

Note: Transformers are a type of artificial neural network and are behind the latest advancement in the field of AI. The AI chat bot, Chat GPT is also build using transformer based architecture.

Reviews sentiment
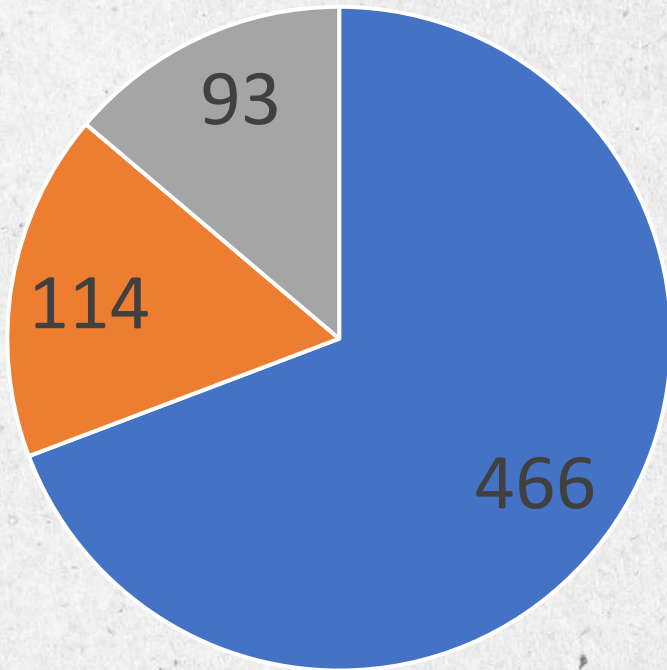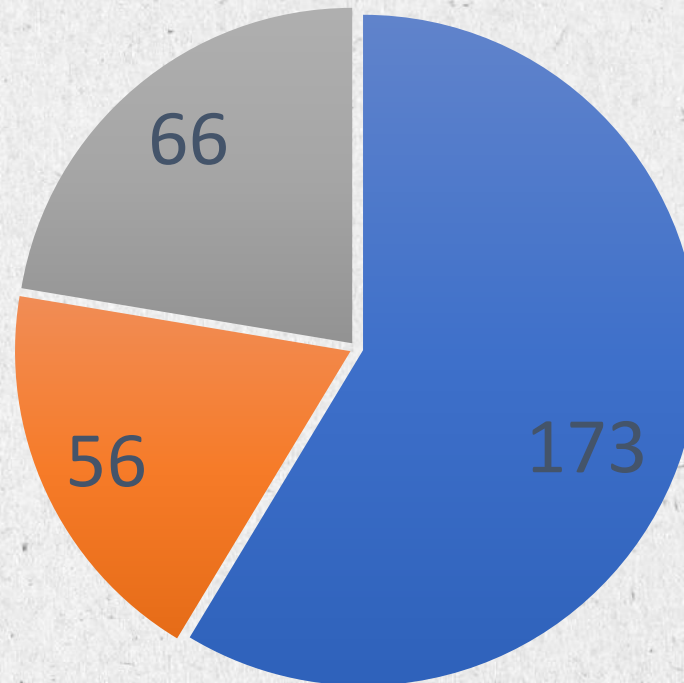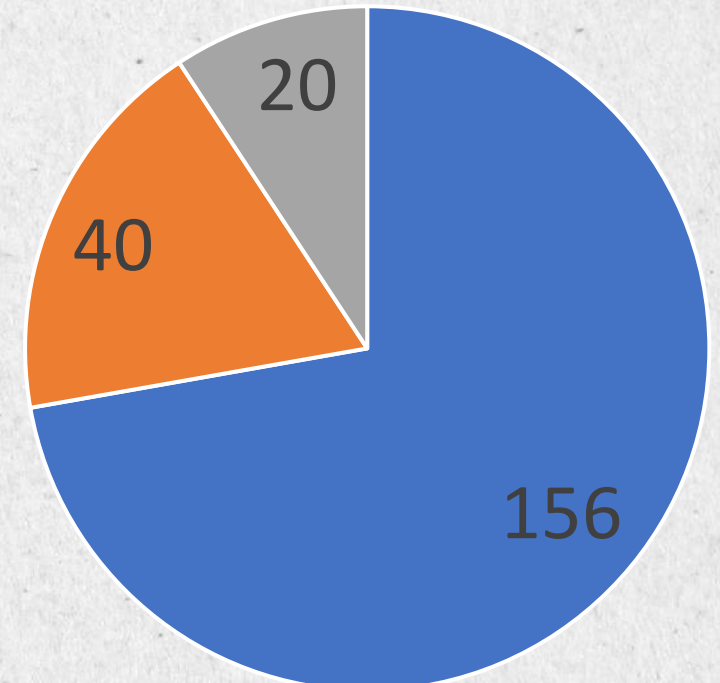
Popular word in positive reviews

My Second Teacher

- Good
- Student
- Best
- Learning
- Nepal
- Platform

MIDAS E-CLASS — SIMPLIFYING LEARNING

- Good
- Teacher
- Student
- Subject
- Platform
- eclass

MERO School — पढाईको नयाँ FUNDA

- Good
- Student
- Course
- Learning
- Video
- Nepal

neema academy

- Good
- Student
- Learning
- Subject
- Teacher
- Content

Popular word in neutral reviews

My Second Teacher
- Video
- Class
- Subject
- Chapter
- Need
- Vayena

MIDAS E-CLASS — SIMPLIFYING LEARNING
- Coin
- Gift
- Quiz
- Subject
- Time
- Dami

MERO School — पढाईको नयाँ FUNDA
- Class
- Course
- Management
- Science
- Update
- Price

neema academy
- Subject
- Solution
- Class
- Course
- Study
- Nepali

Popular word in negative reviews

My Second Teacher
- Google
- Money
- Bad
- Free
- Worst
- Waste

MIDAS E-CLASS
- Class
- Fix
- Worst
- Fake
- Computer
- Subject

MERO School
- Course
- Pay
- Subject
- Video
- Student
- Math

neema academy
- Problem
- Working
- Signing
- Content
- Downloaded
- OTP

Popular tuple in positive reviews

My Second Teacher
- Topic video
- Science topic
- Perfect e-learning

MERO School पढाइको नयाँ FUNDA
- Good app
- Payment system
- Online learning

MIDAS E-CLASS SIMPLIFYING LEARNING
- Nice app
- Learning app
- Animated videos

neema academy
- Nice app
- Class 10
- Quality education

Popular tuple in neutral reviews

My Second Teacher
- Select class
- Login go
- Directly home

MERO School
- Management course
- Class 12
- Fluid mechanic

MIDAS E-CLASS SIMPLIFYING LEARNING
- Get coin
- Class join
- App fake

neema academy
- Account class
- Science subject
- Class 12

Popular tuple in negative reviews

My Second Teacher
- Worst app
- Google classroom
- App ever

MERO School
- Worst app
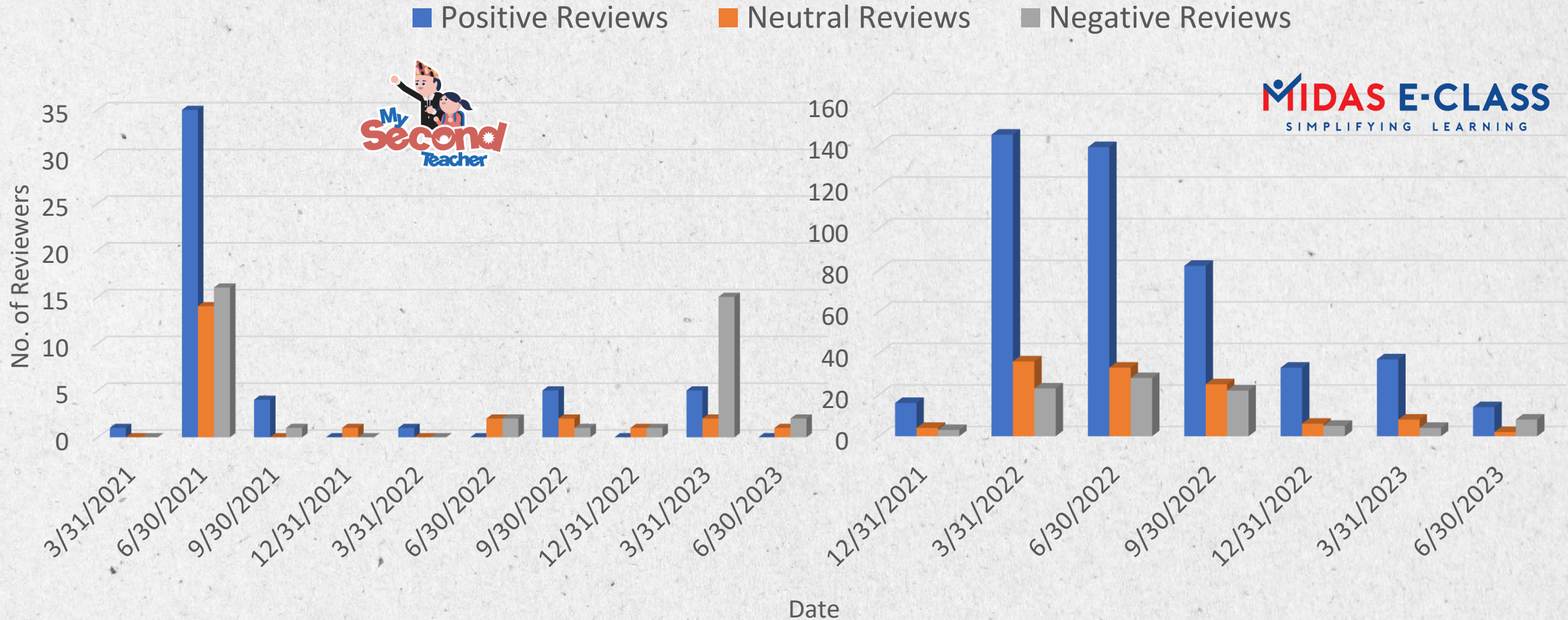- Buy course
- Subject course

MIDAS E-CLASS
- Computer subject
- Online class
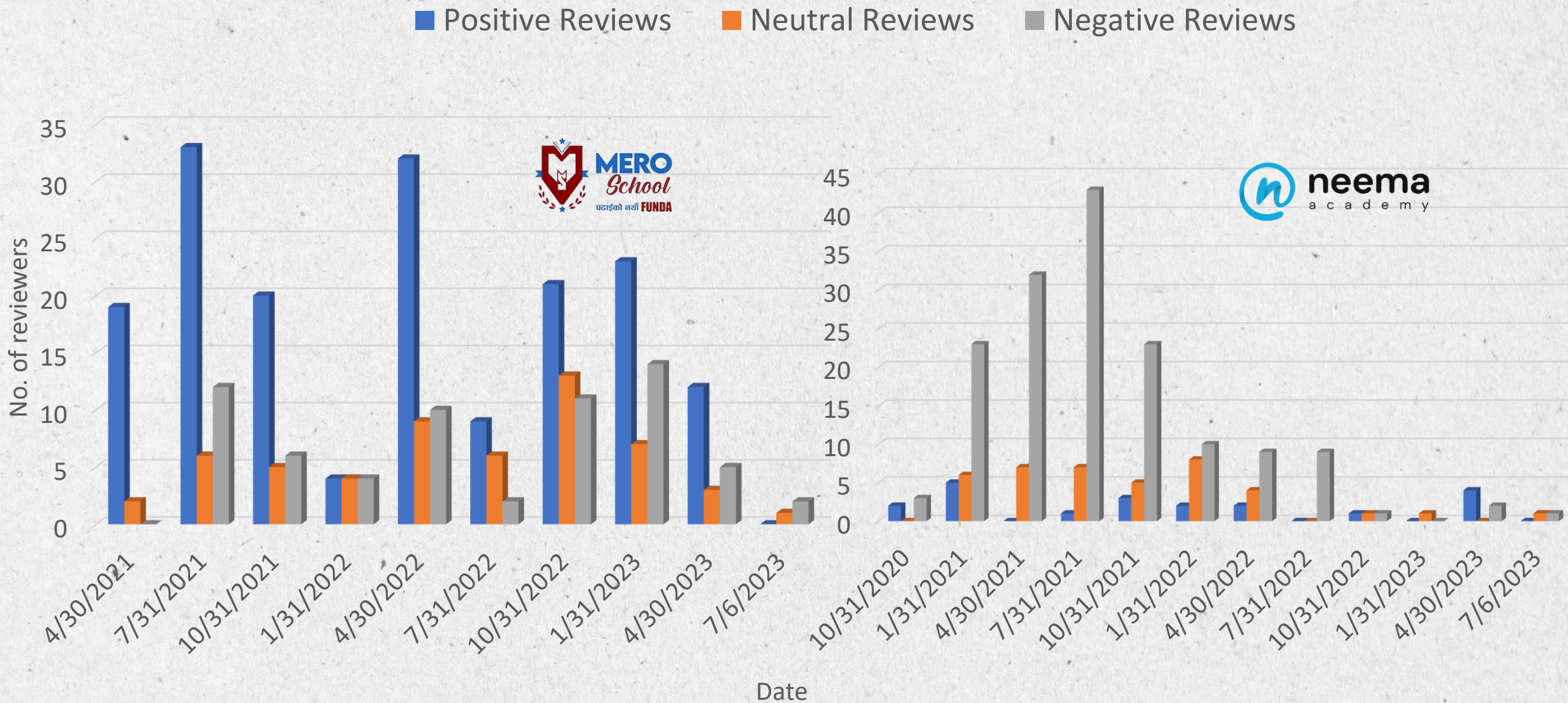- Daily quiz

neema academy
- Downloaded content
- Problem signing
- Enter opt

Reviews sentiment at different period

Reviews sentiment at different period

Findings

01 Positive reviews regarding course materials and applied pedagogy. Previously had sign in issues which seems resolved.

02 Negative reviews are higher than positive reviews in 2023 (slide 16). Most of these reviews are related with technical issues and pricing.

03 Reviewers in different platforms are found requesting for computer science subject. There was also a review in mySecondTeacher. This can be seen as an opportunity for growth.

Findings

04 Online classes and quizzes have a lot of problems.

05 Many negative reviews are associated with the course content and its quality.

06 Has issues on signing in and OPT. Many negative reviews are related to OPT.

Limitations

- The report is only based on reviews provided at Play Store.

- Most of the reviews in Romanized Nepali are classified as neutral because the model, RoBERTa is not trained focusing on such texts.

- Many fake accounts are used for reviews. This adds some inaccuracy in the findings.

- Some positive reviews seems to come from the people associated with the respective EdTech platform. So, there exist little biasness in the report.

References

- https://mysecondteacher.com.np/wp-content/uploads/2021/03/mst-nepal.png

- https://www.midaseclass.com/assets/eacademy/images/logo.png

- https://mero.school/themes/assets/images/logo-dark.png

- https://english.onlinekhabar.com/wp-content/uploads/2021/07/neema_logo.png

Python modules used for research & analysis

- google_play_scraper
- pandas
- numpy
- re
- collections
- matplotlib.pyplot
- wordcloud
- tqdm.notebook

- nltk
- nltk.corpus
- nltk.stem
- nltk.tokenize
- string
- contractions
- transformers
- scipy.special