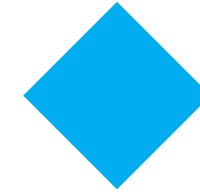# Recorded Lecture Insights – EdTech Dashboard

Unveiling learner trends, content gaps & growth opportunities

Project Overview

The EdTech industry is growing rapidly, especially in recorded lectures.
To stay ahead, our client must align content with learner preferences and market demands.

Goal:
To analyze courses from top EdTech platforms and derive actionable insights using Power BI.

Emphasis:
Category-wise breakdown to target learner demand more effectively.

Business Questions

Our dashboard addresses:

- Which course types dominate each category?
- What are the most preferred categories, languages, and skills?
- How do subtitles impact engagement?
- Who are the top-performing instructors?
- What course duration drives more views?

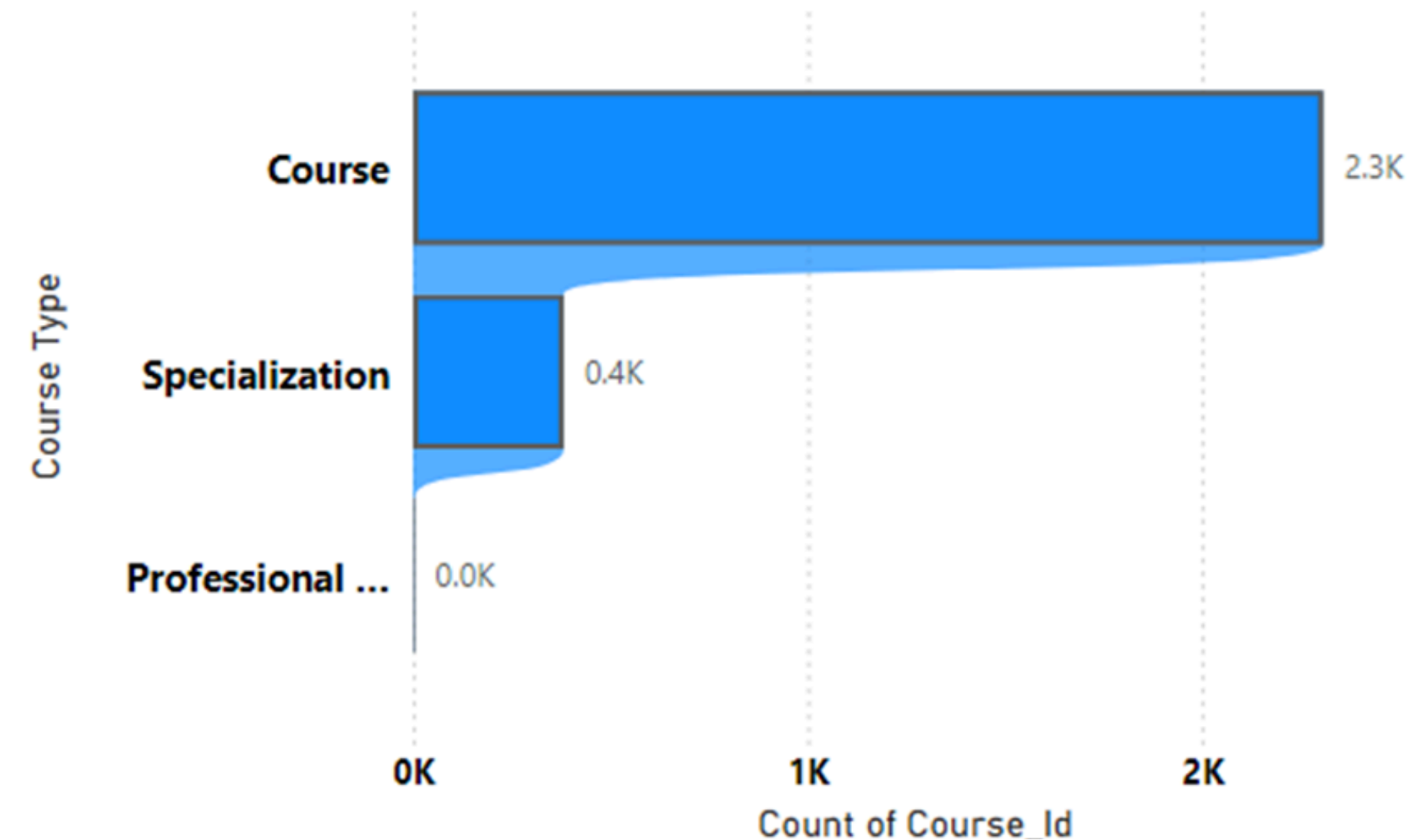Dataset: Used EdTech Dataset from Kaggle

Fields analyzed: Course title, category, sub-category, language, views, ratings, skills, subtitles, duration, instructor

Course Type Popularity

Course Type Popularity

Dominance of General Courses in the EdTech Landscape

Insights:
- A staggering 2,300+ individual courses dominate the recorded lecture space.
- In contrast, Specializations are limited (~400), and Professional Certifications are nearly negligible.
- This clearly indicates that short, focused learning units are the most preferred format among learners and/or creators.

Interpretation:

Learners gravitate toward modular, standalone courses over bundled or longer-form formats — likely due to time constraints and specific skill needs.

Course Type Popularity

Demanding Skills

Key Insights: Skill Trends in EdTech

1. Python, ML, and Data Science dominate course offerings — reflecting market demand for AI and analytics talent.
2. SQL, R, and Cloud Computing also appear frequently, reinforcing the shift toward data infrastructure skills.
3. Excel, Tableau, and Data Analysis indicate a growing focus on business intelligence and analytics across roles.
4. Soft skills like Leadership, Communication, and Problem Solving are critical — showing a move toward well-rounded professionals.
5. The combination of technical and strategic skills is becoming the new standard for employability and upskilling.

Most Popular Sub-Categories (by Avg Views)

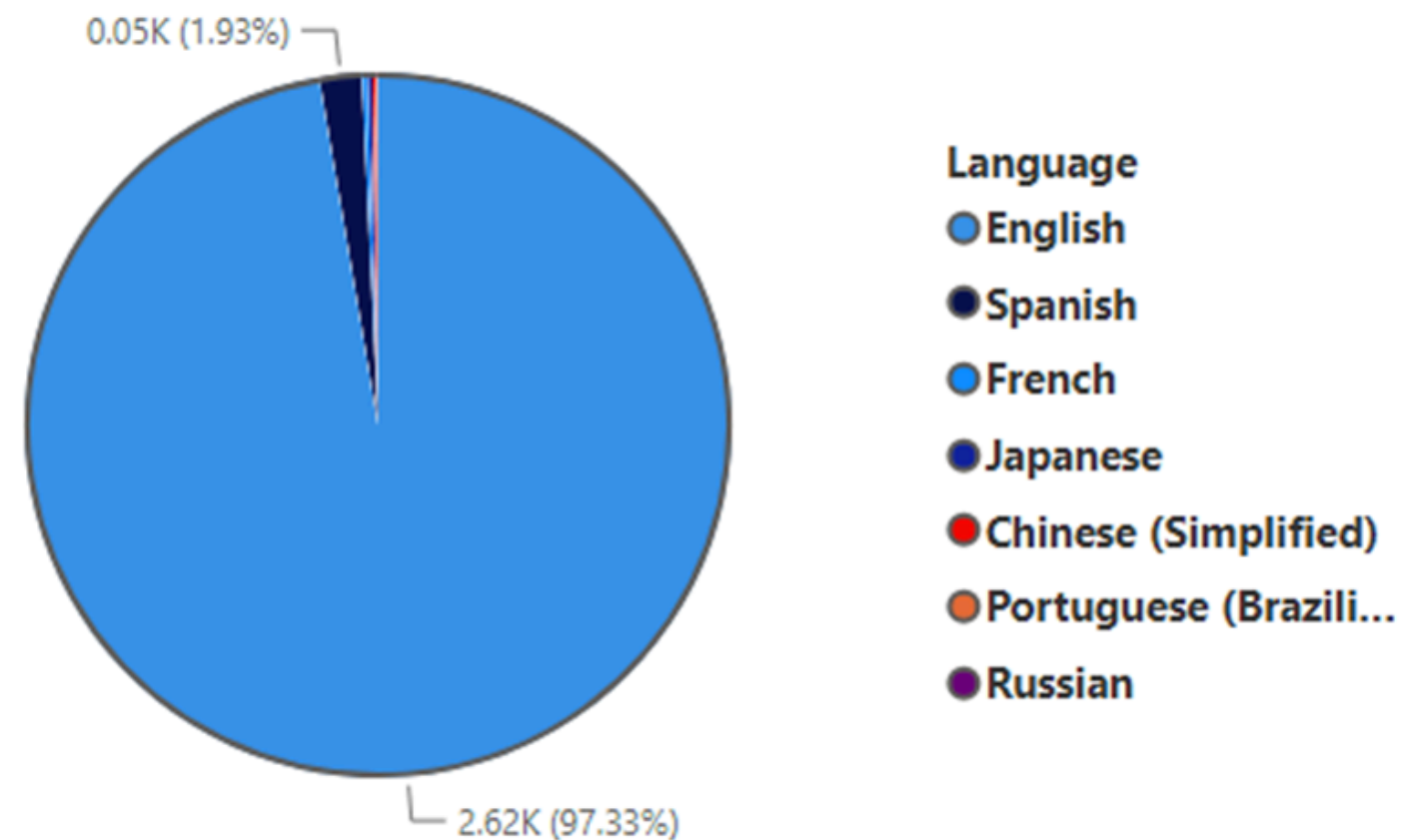Views as per Sub-Category and Language
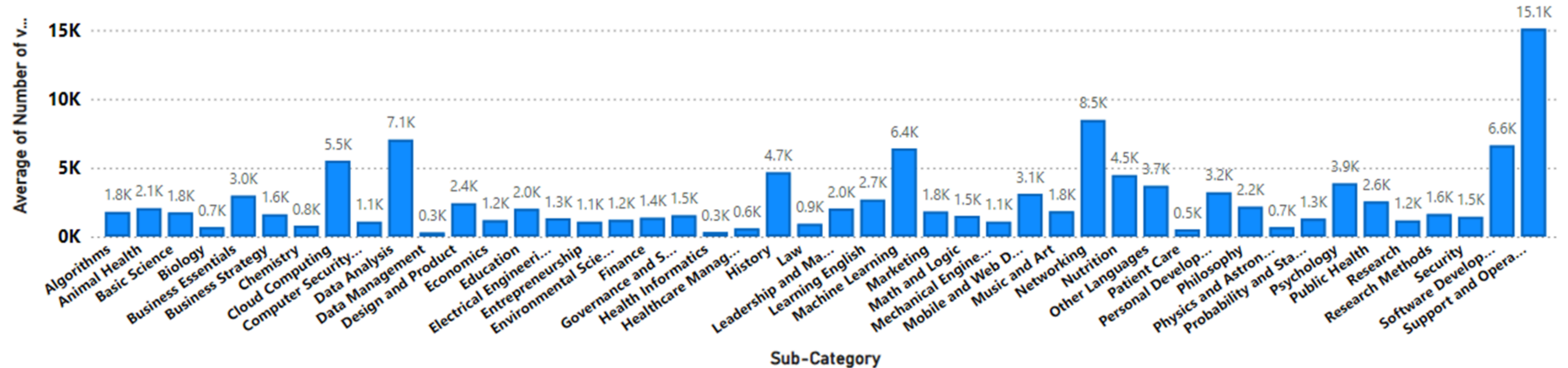
Interpretation:

- Prioritize course creation in:
  Support & Operations, Data Analysis, Cybersecurity, Marketing, Nutrition
- Bundle skill-based content with trending sub-categories, e.g.:
  Data Analysis + Python, Marketing + Visualization Tools, Cybersecurity + Ethical Hacking
- Improve promotion or redesign of underperforming categories like History or Music, or assess their relevance to current platform goals.

Language Preferences

Most Prominent Languages

0.05K (1.93%)

2.62K (97.33%)

Language
- English
- Spanish
- French
- Japanese
- Chinese (Simplified)
- Portuguese (Brazili...
- Russian

• Key Stats

1. English dominates with 97.33% of total content views (2.62K / 2.69K)
2. All other languages combined = ~1.93% of views

Indicates a highly English-centric learner base

• Interpretation

1. English is the primary learning medium, especially in tech & professional content
2. Extremely low representation of Spanish, French, Japanese, and others
3. Reveals a major language accessibility gap — potential for wider global reach

Subtitle Languages vs Viewership

Average of Number of viewers by Subtitle Language Count
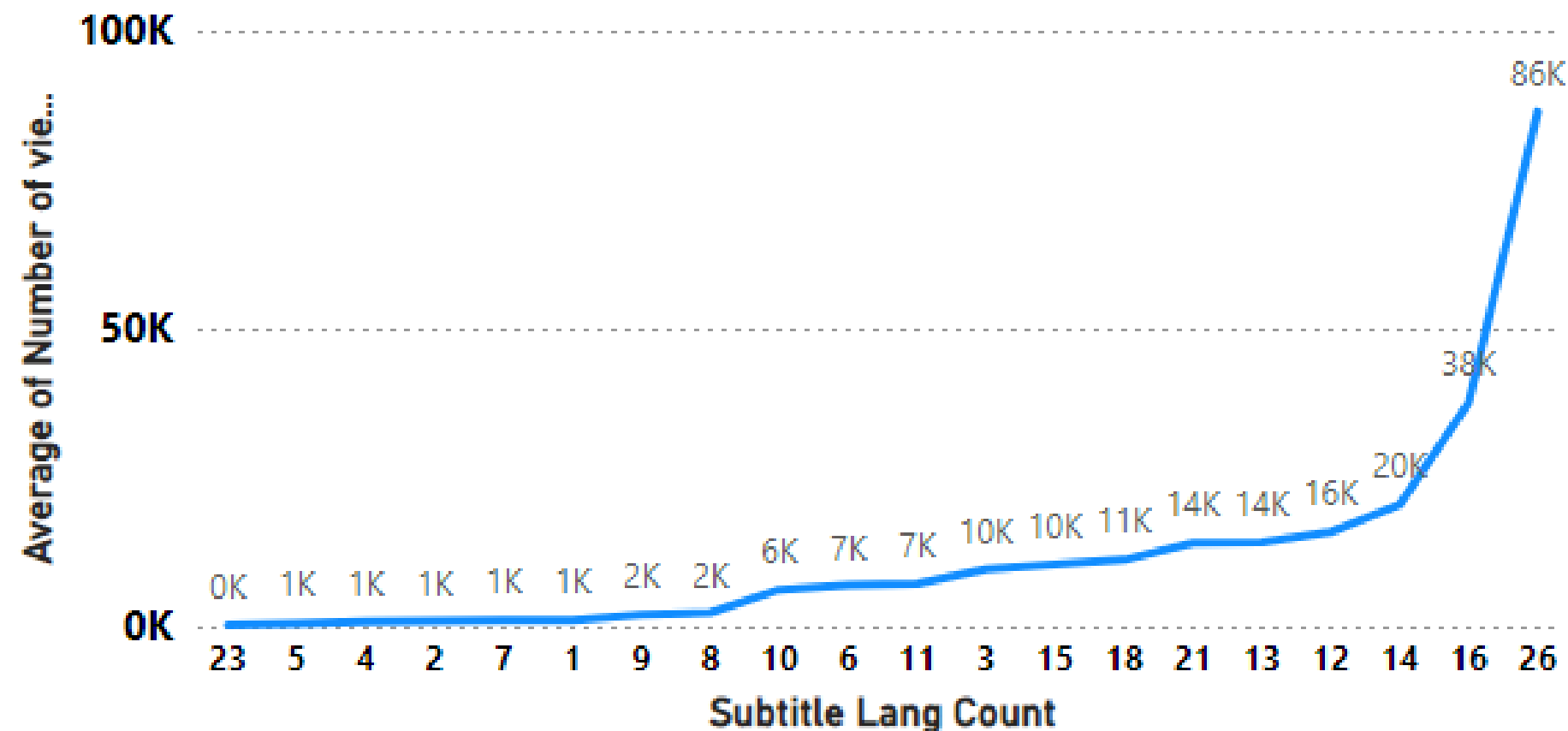
Key Insight
- There's a strong positive correlation between subtitle count and average views
    - <10 subtitles → ~1K–7K views
    - 10–16 subtitles → 10K–20K views
    - 26 subtitles → 86K views 📈

Multilingual subtitles significantly expand audience reach

Strategic Recommendations:
- Add 10+ subtitle options to top-performing courses (e.g., Cybersecurity, Data Analysis)
- Use AI or crowdsourced translation tools to scale multilingual subtitles
- Enhances accessibility and aligns with inclusive learning goals

Viewership by Course Duration

Viewership on Basis of duration of Course
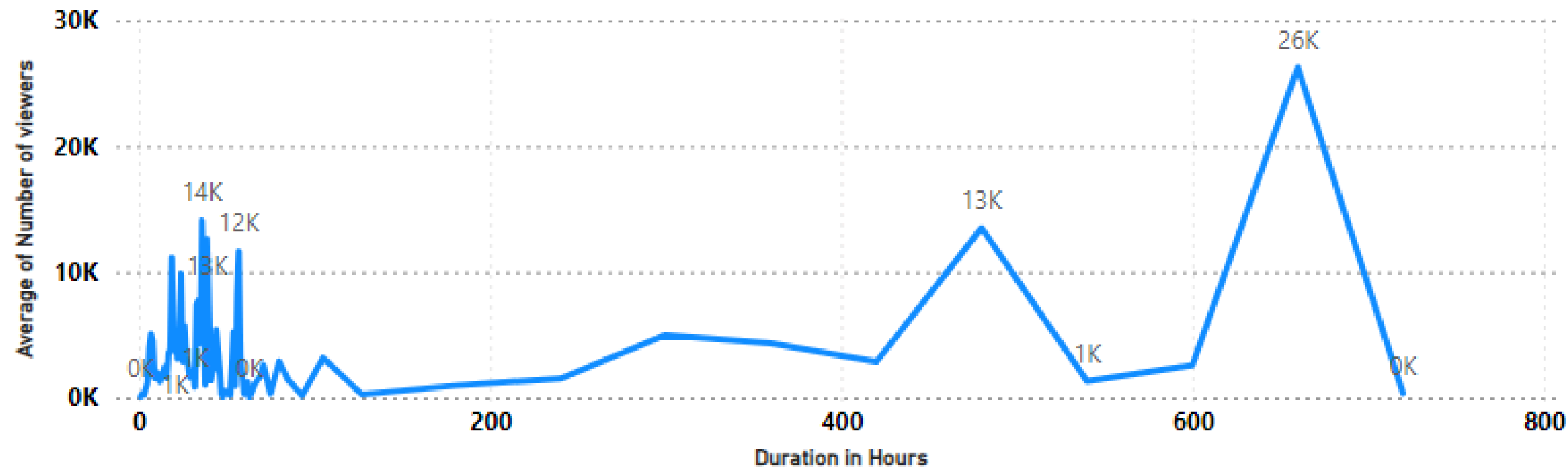
Recommendations:

- Focus on short to mid-length courses (0–50 hrs) or well-structured longer ones (~450–650 hrs).
- Avoid excessively long formats unless content is modular and engaging.

Category-Wise Skill Coverage vs Popularity

Average of Number of Skills, Average of Duration in Hours
BY CATEGORY

Category	Average of Number of Skills	Average of Duration in Hours
Computer Science	4.06	61.91
Data Science	4.74	60.99
Arts and Humanities	4.02	60.03
Math and Logic	2.71	59.62
Physical Science and Engineering	2.89	57.10
Business	3.79	56.26
Language Learning	1.93	56.00
Information Technology	3.73	53.07
Health	3.02	51.13
Social Sciences	3.33	50.79
Personal Development	4.47	50.19
Total	**3.80**	**57.11**

Rank_category_by_avg_views
BY CATEGORY

Category	Rank_category_by_avg_views
Data Science	6,382.60
Information Technology	4,647.74
Computer Science	4,403.80
Personal Development	3,220.66
Language Learning	2,925.13

- Data Science leads with highest views (6.3K) and highest skill count (4.74).
- Computer Science offers long courses (~62 hrs) with high skill depth (4.06 skills).
- Information Technology is third in skill count (3.73) but second in views (4.6K) — high demand with less duration (~53 hrs).
- Personal Development is popular despite lower average course duration (~50 hrs), showing user preference for concise content.
- Language Learning has lowest skill coverage (1.93) and lowest viewership (~2.9K), indicating limited interest or saturation.

Top Instructors by Category/Subcategory

Instructor_rating

BY INSTRUCTORS

Instructors	Instructor_rating ▼
Barbara Oakley	5.00
Beth Rogowsky	5.00
David Joyner	5.00
Dr. Terrence Sejnowski	5.00

Insight Summary:
- By leveraging Power BI slicers, we identified top-performing instructors within each category and subcategory.
- These insights allow stakeholders to pinpoint top educators within specialized fields for:
  - Content development partnerships
  - Targeted promotional campaigns
  - Quality benchmarking across disciplines

Thank you