

AMENDED Exhibit 755

PLAINTIFFS' OMNIBUS OPPOSITION TO DEFENDANTS' MOTIONS FOR SUMMARY JUDGMENT

Case No.: 4:22-md-03047-YGR

MDL No. 3047

In Re: Social Media Adolescent Addiction/Personal Injury Products Liability Litigation

YOUTUBE and LEARNING & EDUCATION

2022+ joint skilling vision: Pre-read & pre-work for workshop

Define a shared skilling vision across YouTube and Learning & Education that guides the future product roadmap and required investments

Summary

This doc presents outlines the case for skilling, summarizes our current skilling offering, and highlights questions for reflection and pre-work required in advance of our first workshop

Status: Final

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I. [HYPERLINK "ddpabi0rhdn" \h]

- A. [HYPERLINK [REDACTED]] [HYPERLINK [REDACTED]]
- B. [HYPERLINK [REDACTED]]
- C. Lessons from the past
- D. Additional optional reading
- E. Possible future plays

II. [HYPERLINK [REDACTED]]

Pre-Read

A. Why skilling, why now, why Google

Why skilling

- **Socio-economic outcomes:** The existing system is inefficient and lacks desired outcomes: college completion rates are low and, when graduation happens, it often results in unemployment or underemployment; even short vocational programs yield unemployment rates of up to 40%¹. The Covid pandemic has further exacerbated the cracks in educational access, outcomes, and equity. MOOCs have failed to demonstrate impact at scale (low completion rates, high overhead)
- **Business potential:** Addressing it offers significant business potential: skilling is the fastest growing edtech market segment, projected to become a \$130B² TAM by 2025. This is fuelled by the impact of the fourth industrial revolution, with up to 60%³ of jobs impacted by technology change and/or globalization
- **Value to users:** Too often skilling initiatives are designed with the employer as the key stakeholder. As one of the world's largest D2C platforms, YouTube has the opportunity to

¹ Inside Higher Ed: [HYPERLINK "https://www.insidehighered.com/quicktakes/2020/02/18/41-recent-grads-work-jobs-not-requiring-degree" \h] from the [HYPERLINK "https://www.newyorkfed.org/research/college-labor-market/college-labor-market_underemployment_rates.html" \h]

² [HYPERLINK "https://docs.google.com/[REDACTED]" \h]

³ BCG, [HYPERLINK "https://www.bcg.com/publications/2019/decoding-global-trends-upskilling-reskilling" \h]

to establish themselves as a destination for learning. We are not as nimble and understaffed relative to other responsibility verticals.

- No other platform in the world is as well positioned as YT to address the educational crisis at this scale but we risk falling behind.

B. Our current play

Key facts of learning on YouTube

Search has an outsized impact on academic learning than the general content (25% vs. 12%). The 7 day average DAU of Academic Engaged Users is ~28M, with 37% in India and 6.4% in the U.S. We currently do not have a Skilling classifier needed to measure this specific user case but it is on the roadmap.

This information-seeking experience tends to monetize at lower rates than entertainment content experiences. This is due, in part, to Learning creators optimizing for the most focused learning experience over non-skippable ad formats, which are often sold through Reserve, not Auction. Top Creator and Curiosity creators earn nearly a quarter of their revenue from Reserve Ads, while over 90% of Academic and Skilling creators' revenue comes from lower CPM Auction inventory. However, these creators still need revenue and often turn to off-platform options to supplement their ad revenue. For example, the Crash Course channel makes nearly half their revenue through Patreon.

The Product/Eng teams have a EOY OKR to double the number of users interacting with educational content on the platform. They have prioritized a goal of facilitating these users on their learning journeys. The first use case is to help users pick up where they left off by improved ranking of previously unfinished videos/playlists on academic seeking queries and by recommending more personalized videos to academic queries. The second use case is to help users identify videos at their levels by filtering chips for learning (various difficulty levels, grade level, etc.)

Finally, a recent study of YouTube and TikTok U.S. weekly users found that 80% of YouTube users report it "is a place to learn and build skills," outperforming TikTok by 10 points. And 83% report YT "is a place to explore my interests," outperforming TikTok by 6 points.⁶ Learning is the only breakaway category for GenZ users on YT vs TikTok. Learning is also a key strength in brand awareness and approval. Per YT KOFgeist, 2 out of 3 KOFs agree YouTube performs well on being a place to build skills. "Is a place to build skills" was ranked #1 with 65% of global respondents.⁷

⁶ [HYPERLINK

"https://docs.google.com/[REDACTED] Brand Health Tracker Q2 202

⁷ [HYPERLINK

"https://docs.google.com/[REDACTED] YT KOFgeist March 2021

Embed Player

YouTube is working on building an Edu-Specific Embed Player that relies on a subscription revenue model. This will work with Google Classroom but also with other 3P ecosystem players.

Earned Credit Experiences

The vision for Earned Credit is to set up YouTube as an accessible onramp to any 3P accredited degree program. Via partnering edu creators with academic institutions, YouTube can become the entry door to higher education. The approach is to invest in and scale an Earned Credit program of credit-bearing content, aligned to defined job skills and objectives, initiated entirely on YouTube.

This model has been piloted with ASU and CrashCourse as Study Hall. V1 launched in 2019 and gathered 1M views and 45k WTH across all episodes. In the next version, CrashCourse will develop 150 videos on how college (really) works, fast guides to majors and electives, and college foundations (e.g., statistics, macroeconomics).

As part of Google's India Digitization Fund (IDF), YouTube will partner with India's National Skill Development Corporation (NSDC) to develop high quality authoritative skilling content to reach millions of displaced day workers, unemployed and underemployed users. NSDC has the goal to train 400M people in 37 priority industry sectors by 2022, but with their current capacity they are only able to train 5M per year. This project is a strategic shift to mobile delivery of content away from traditional bricks and mortar delivery. Credentials will be awarded on the NSDC site in a similar user journey to the Study Hall model.

Finally, in 2022 YouTube will partner with Harvard Medical School to create a pathway to earn Continuing Medical Education Credits from the entry point of their YouTube channel.

Qwiklabs / Monorail

Google already has a learning platform in the Cloud teams: Qwiklabs. It offers many of the components of a course (e.g., course overview with ease of navigation, instructor tools such as learner stats). A key differentiator of this platform vs some 3P learning platforms is the ability to support hands-on labs embedded in the UI.

Grow with Google is currently offering its IT 101 certificate on Qwiklabs to US Community Colleges (Project Monorail). Hosting the certificate on our own platform allows Google to offer it free to Community Colleges, thereby making it accessible to institutions that would otherwise not be able to afford the \$39 monthly Coursera fee per student. It also offers enhanced capabilities for Instructor-Led Training (i.e., better SIS integration, enhanced set up, more instructor tools).

C. Lessons from the past

Learning Playlist (fka Courses) was announced in June 2019 and the Beta was live until July 2020. The beta was limited to only credible creators to meet user expectations and limit brand risk. This stems from UX findings that identified that:

- Consumers assumed the Learning Playlist badge indicated that YouTube monitored, reviewed and approved or restricted content from a list of accredited Edu creators
- The additional structure of the playlist also served as a signal of credibility

However, determining creator credibility proved challenging. Even a pilot credibility review process with a 3P provider (UpWork) struggled to produce applicable outputs (e.g., 3 PhDs agreed only quality only 15% of time).

From August to December 2020 the existing migrating playlists were migrated to “light LPs” and the focus shifted to enhancing core systems and surfaces to facilitate learning journeys. The rationale for this and the key lessons learned were:

- 90% of watch time on Learning Playlist videos happened outside of the playlist context
- Learning Playlists led to longer engagements but less of them, resulting in reduced content watch time
- Creators questioned the extra effort and expected increased ROI; some also challenged the need to launch content upfront vs being able to offer it incrementally

As an open platform, scaling features responsibility is a challenge, particularly around high stakes experiences like learning. The core takeaway from the xfn team was that until guardrails around access and operational process are established, the product strategy should not rely on learning-specific features.

D. Possible future plays

Towards a skilling platform

Because skilling often requires a structured experience that can serve as the primary delivery mechanism for learning, a ‘course’ is often the fundamental unit. Building a skilling platform requires ensuring we have a mechanism to discover, enroll, and complete courses. A typical course includes 150 readings, 200 assessments (quizzes, surveys, hands-on work), 250 videos (3-5m each), 20 vignettes (day in the life, stories of career).

There are 5 table-stakes components required for a successful delivery of an online course:

- **Discoverability:** a clear course catalogue easy to browse and search, with ratings and reviews. For a given course, learners need a clear entry point and an overview of the full course (description, what you’ll learn, career vignettes [day in the life, career stories])
 - Strengths: YouTube offers the largest library of learning content and a vibrant community of creators
 - Gaps: Learners struggle to identify high quality content at the right level and entry point for them. They also struggle to stay on track when the predominant user experience is Watch Next but recommendations don’t align to a defined learning journey.
- **Course structure:** with clear progress tracking. Should include: syllabus / index, sequential playlist, videos and enhancements (e.g., embedded questions / quizzes, searchable transcripts, video markers), ability to support additional formats, (e.g., text / PDF attachments)
 - Gaps: current learning experience on YouTube is distracting and lacks the structure required to enable deeper learning / learning pathways. Another key gap is the ability to support formats other than video, incl. hands-on practice exercises
- **Payment options:** a two-sided marketplace that allows learners to purchase / subscribe and creators to tap into additional revenue sources

Commented [1]: You can either reach a lot of people with learning videos, or you can keep viewers in a learning context once they are watching a learning video, but not both. If you remove non-learning things from the watch next of learning videos, then those videos will have far less reach.

- **Gaps:** we would need to build a payment solution to enable one-off and/or subscription-based purchases and explore new creator monetization models
 - Monetization challenges for evergreen academic and skilling content
 - Skilling content is the lowest monetizing of the learning portfolio (skilling creators disable non-skippable ads, resulting in only 1% of their revenue coming from reserve ads)
 - Revenue share is significantly more favorable using other video platforms
- **Credentialing:** authentication / verification, proctoring, and certification to prove learning to employers
 - **Gaps:** explore partnerships with content providers that result in recognized certificates
- **Assessment:** to be able to validate learning for the certificates referred to above. It can have several components:
 - **Assignments:** posting with due dates, notifications, work canvas (e.g., coding) or 3P integration, student submission, class or community sharing
 - **Quizzing:** multiple choice, free response, timed exams
 - **Grading / reporting:** auto-grading, peer grading, speed grading tools, reporting, analytics
 - **Mastery assessment / hands-on practice:** multiple choice quizzes test what people know, not what people can do. Therefore, this does not necessarily correlate to skill mastery, which is what employers care about. Hands-on assessments and project-based learning are much more reliable, albeit harder to scale
- Furthermore, there are additional capabilities that enhance the value to and experience of **learners:**
 - **Learner discussion / forums:** peer-reviews, TAs, instructors, FAQs, message boards
 - **Community:** class announcements, 1:1 messaging, Q&A, forums, peer support
 - Live sessions: video conferencing, live streams, live chat
 - **AR/VR immersive experiences:** can scale access to expensive hands-on learning while increasing engagement
- And additional capabilities that enhance the value to and experience of **creators:**
 - **Course creation & management:** Tools to easily create, edit, evaluate, and manage a course
 - Ability to grant/ honor **scholarships**
 - Ways to track **student progress**

E. Additional optional reading

- ClassCentral: [[HYPERLINK "https://www.classcentral.com/report/2u-edx-acquisition-analysis/"](https://www.classcentral.com/report/2u-edx-acquisition-analysis/) \h], Jul 2021
- EdSurge: [[HYPERLINK "https://www.edsurge.com/news/2021-05-04-mapping-out-a-credential-as-you-go-movement-for-higher-education?utm_medium=email&_hsmi=125666533&_hsenc=p2ANqtz-_MY4TZuiVlrS8JBo_jREgNCyn6qFNBBxpblwo2hBwl9fnnB_rIMUU6yTfwBSSpcmMnjITMOB4ne_hr5OlbCVQG2CgJT&utm_content=125666533&utm_source=hs_email"](https://www.edsurge.com/news/2021-05-04-mapping-out-a-credential-as-you-go-movement-for-higher-education?utm_medium=email&_hsmi=125666533&_hsenc=p2ANqtz-_MY4TZuiVlrS8JBo_jREgNCyn6qFNBBxpblwo2hBwl9fnnB_rIMUU6yTfwBSSpcmMnjITMOB4ne_hr5OlbCVQG2CgJT&utm_content=125666533&utm_source=hs_email) \h], May 2021
- Phil on EdTech: [[HYPERLINK "https://philonedtech.com/courseras-ipo-putting-the-companys-market-cap-in-](https://philonedtech.com/courseras-ipo-putting-the-companys-market-cap-in-)

perspective/?utm_source=rss&utm_medium=rss&utm_campaign=courseras-ipo-putting-the-companys-market-cap-in-perspective" \h], Mar 2021

- ClassCentral: [HYPERLINK "https://www.classcentral.com/report/udemy-vs-coursera/" \h], Jan 2021
- Inside Higher Ed: [HYPERLINK "https://www.insidehighered.com/quicktakes/2020/02/18/41-recent-grads-work-jobs-not-requiring-degree" \h], Feb 2020
- BCG: [HYPERLINK "https://www.bcg.com/publications/2019/decoding-global-trends-upskilling-reskilling" \h], Nov 2019

Pre-Work

Problem statement: Learning creates economic **opportunity** and **advancement** for **all**.

Desired learner outcome: Acquiring **competency** and **credentials** lead to employability.

Success means:

- Double number of users who engage with educational content
- While meeting users expectations of veracity & quality
- And building out a user experience that enables structured learning and progression
- and enabling a sustainable ecosystem of content creation to cover a breadth of subjects and learning experiences

Within this problem statement, desired outcome and objectives, please reflect on the following questions for our discussion at Workshop I.

- If not this problem statement, what problem are we trying to solve? [Ask a series of *why?*]
 - A. What pressing issues / problems do we want to solve?
- One audacious goal for Google in 5-10 years
- How do we measure success?