**The Framework: Mapping Educational Dynamics**

**Purpose and Scope** This framework explores the dynamics between paid educational systems and free learning resources. It evaluates their impact on accessibility, credibility, flexibility, and relevance to learners’ personal and professional goals. By mapping these relationships, we aim to clarify how learners navigate the modern education landscape.

**Key Relationships**

* **Cost and Accessibility**: How cost affects availability and inclusivity.
* **Credibility and Trust**: The perception of legitimacy between institutions and platforms.
* **Flexibility and Depth**: The gap between structured programs and self-paced learning.

**Methodology** To create the framework, we:

1. **Identify Key Characteristics**: evaluate cost, time investment, credibility, and learning outcomes for each platform.
2. **Analyse User Perspectives**: surveys or case studies, focusing on how learners value these systems.
3. **Visualise Connections**: graphs or ontological maps to illustrate overlaps, contrasts, and interdependencies.

**Proposed Visualisation**

* **A Comparison Chart**: Displaying the pros and cons of each platform.
* **A Flowchart**: Mapping a learner’s decision-making process (e.g., choosing between free vs. paid resources).
* **An Ontological Map**: Highlighting relationships between characteristics like cost, accessibility, and credibility.**Establishing a Theoretical Foundation**

Before creating an ontology representing educational dynamics, it is essential to establish a theoretical framework for our project. Reviewing literature in the fields of Education Theory, Digital Pedagogy, and Cognitive Psychology helped us identify key paradigms and concepts of our knowledge representation system.

**Educational Paradigms and their Evolution** Education has traditionally been categorised into formal, informal, and non-formal structures. Formal education, encompassing universities and schools, has historically emphasised standardised curriculums and accredited learning. Informal education, epitomised by self-directed platforms like YouTube, has grown exponentially in the digital era, offering accessibility but often lacking structured credibility. Non-formal methods, including paid online courses, hybridise these approaches by delivering structured, credible education without traditional institutional frameworks.

**Framework for Assessing Knowledge Dynamics** Drawing from theories like Vygotsky’s *Zone of Proximal Development*, which emphasises guided learning as a cornerstone of education, we can compare the mentorship provided in formal education against the self-directed nature of free online resources. Furthermore, the concept of *Knowledge as a Social Construct* (Berger & Luckmann, 1966) frames our understanding of how societal perceptions shape the credibility of different educational approaches.

**Media and Accessibility** McLuhan's *The Medium is the Message* theory highlights the role of delivery platforms in shaping education's effectiveness. Paid courses, YouTube, and free platforms each embed inherent biases based on their mediums, influencing learners' experiences and perceptions.

**Towards an Ontology** Our ontology reflects the interplay of these paradigms, emphasising dimensions such as accessibility, credibility, adaptability, and societal perceptions. By incorporating theoretical insights, we aim to model not just the systems but the learner's journey within the educational landscape.

**1. Comparison Chart**

**Purpose**: illustrate differences across platforms like universities, YouTube, MOOCs, etc.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Platform** | **Cost** | **Credibility** | **Flexibility** | **Depth** | **Accessibility** |
| Universities | High | Very High | Low | Very High | Medium |
| YouTube | Free | Low to Medium | Very High | Low to Medium | High |
| Paid Courses | Medium to High | Medium to High | High | Medium to High | Medium |
| Free Platforms | Free | Medium | Medium to High | Medium | High |
| DIY/TikTok | Free/Low | Low | Very High | Very Low | High |

**2. Flowchart: Learner Decision-Making**

**Purpose**: an insight on how people choose between platforms.

**Example logic**:

* **Goal Identification**
  1. Career Development → Paid/University
  2. Personal Curiosity → YouTube/DIY
* **Time and Cost Consideration**
  1. Limited Budget → Free Platforms/YouTube
  2. Flexible Budget → Paid/University
* **Credibility Requirements**
  1. Certification Needed → Paid/University
  2. No Certification Needed → YouTube/DIY

**3. Ontological Map: Connecting Key Characteristics**

**Purpose**: show relationships between attributes like cost, flexibility, and credibility.

* **Nodes**: Platforms (Universities, MOOCs, YouTube).
* **Edges**: Links based on characteristics ("High Flexibility" => Free Platforms and YouTube).

**Visualisation Tool**: Lucidchart, Xmind or MindMeister.