Written Design Document:

Artstander

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1.1 Background

According to Kemph (1968), adolescence is the time when the process of identity creation becomes prominent. Adolescents would search for tangible objects or salient symbols to explore and express their evolving identities during this rite of passage from childhood to adulthood. With consumerism on the rise, today' adolescents have more options, with fashion being one of the most popular. They use fashion as a form of self-expression, as well as signals to identify people in their league, and fulfillments to feel confident (Piacentini & Mailer, 2004). Individual preference (Ma et al., 2019) and definition of fulfillment (Suh, 2020) are thus closely tied to how one chooses to represent themself, be it through the garments they wear, the filters they utilize for selfies, or the makeup with which they enhance or modify their features.

In these everyday choices, however, the prevalence of social media influence is clear. According to the Common Sense Census, by 2019, 84 percent of American youths aged 13-18 owned their own smartphones (up from 67 percent in 2015), and the average screen time dedicated to entertainment media had risen to an astonishing number of 7 hours and 22 minutes per day. Many other countries throughout the world are experiencing similar situations. Social networking spaces not only provide opportunities to be, belong, or let go; they are also a larger engine in which their audiences seek advice or the opinions of others, often through various methods of textual or visual storytelling (Bailey et al., 2021).

"The integration of 'social commerce' onto platforms like Instagram and TikTok further blurs the lines between scrolling and shopping. Users don't have to head to a retail site to intentionally browse. Their social media feeds are frequently encouraging them to buy through direct advertisements, influencers, or even their peers (Nguyen, 2021), as also seen in the uptick of impulse purchases among the "Generation Z" population (Djafarova & Bowe, 2021) and the struggle of self-regulating attention and passivity on social media feeds (Vraga et al., 2016).

1.2 Problem statement

As discussed above, teens are keen explorers in fashion, and always turn to social media for inspiration. However, the fashion information on social media is sometimes sided and almost always too superficial to show the complexity of fashion.When viewing trends on social media, it is common for the visual information to be presented out-of-context and on seemingly unrelated basis to stylistic historical references. Influencers and brands usually focus on picturing

the popularity and visual attractiveness of the styles, especially on popular platforms centered on images and short videos like Instagram and TikTok.

However, fashion, as a multifaceted socio-cultural artifact, has much more meaning than pure aesthetical presentations. It occupies online spaces and poses considerable conflict in its cultural, ethical, and socioeconomic implications for consumer choice and personhood. But teenagers often fail to recognize this complexity, and sometimes are unaware of or bystanders to the harmful effects certain trends have on marginalized peoples. The fox eye makeup craze, for example, could be embedded with sexualized stereotypes of Asians and even discrimination during a time of heightened anti-Asian sentiment. Similarly, a non-Black person wearing dreadlocks could be criticized as a cultural appropriator and insensitive considering that the hairstyle is often discriminated against in so-called professional settings.

Artstander's goal is therefore not only to foster consumer/learner/audience criticality of the images and trends they absorb, but more importantly, to apply that criticality to their own individual practice, "wear" it, and express it. Adolescent learners are expected to demonstrate a change of critical attitude, knowledge and analytical skills:

Knowing that "it matters" to be mindful when making choices about fashion;
Knowing how to search for evidence that supports them to make such decisions, and;
Knowing how to speak up in their own voice.

2. Target Audience

2.1 General description

Our target users are high school-age adolescents, primarily those who look to social media for visual inspiration. Artstander's considerations for older adolescents as our target audience, particularly those aged between 15 and 18, stem from various factors of social media awareness, literacy, and everyday use.

Adolescence is a period of rapid cognitive and social-emotional development in which young people are susceptible to changes and can be easily influenced by information they receive in daily lives. This is a critical stage of developing their own identities, especially in a social context. This age demographic, dubbed Generation Z (or "Gen Z"), are more aware of socioeconomic disparities at their age compared to their younger peers, and are more likely to notice the same disparities compared to their millennial counterparts at the same age. This could be due, in part, to the "digital natives" narrative, as well as to the sustained internet culture surrounding celebrities and memes aside from the prevalence of accessible news outlets and sources they have become accustomed to from young ages.

In this manner, Artstander has developed a fictitious learner profile as an exercise in social science fiction to pose an ill-structured problem posed on and beyond social media:

Ann, a 17-year-old Asian-American cisgender girl, is a a heavy user of Instagram and TikTok. Her feed is catered toward fashion and make-up. Throughout the day, she spends a minimum of 2 hours browsing the latest trends and stays "caught up". She senses that

she is not very comfortable with the fox eye trend, but at the same time, she also thinks that it is flattering. Holding onto these vaguely mixed feelings, however, she remains confused about whether to adopt this trend due to its proximity to race-baiting, but is hesitant to discuss her misgivings with friends, most of whom are White and have adopted the trend, out of trepidation of being seen as "rude" or "sensitive".

In the following analysis, we take a closer look at the characteristics of our target audience through conducting literature review and 5 interviews (see appendix):

Cathy, female, 21, social media influencer, Beijing
Olive, female, 17, high school student, NYC
Cindy, female, 15, high school student, Shanghai
Chris, male, 17, high school student, London
J, male, 17, high school student, Ohio State

2.2 Characteristics

2.2.1 Cognitive

According to Kitchener (1983), when facing ill-structured problems, an individual's cognitive processing could be divided into 3 levels: 1) the *cognitive* level: memorization, perceiving, and problem-solving; 2) the *metacognitive* level that is common by early adolescence: monitor their own progress in first-order tasks; and finally 3) the *epistemic* cognitive level that develops in late adolescent and adult years.

The growing ability of integrating knowledge in different contexts and perspectives. With the development of their epistemic cognitive skills, teens start to "reflect on the limits of knowing, the certainty of knowing, and criteria of knowing", which is related to determining when is appropriate to apply a particular strategy (Kuhn, 1983). Two major shifts occur in this stage. One would be contextual relativism (Perry, 1970). Adolescents would be able to comprehend knowledge in its embedded context. Another would be seeing knowledge as the "outcome of the ongoing process of reasonable inquiry" (Kitchener and King, 1981). In other words, they begin to gain knowledge through a process of constant communication and integration of diverse perspectives.

Metacognitive skills. The learning goal and task that Artstander aims to achieve, and the learner group it is designed for, are closely linked to the above discussions. First, critical thinking is perceived as a metacognitive process. Therefore, to better promote criticality, the design should include more scaffoldings to guide adolescents through the process of analyzing, evaluating, inferencing, and mindful reflection. (Hogan et al., 2015). Secondly, the meaning of fashion could vary greatly under different contexts, so learners should be able to analyze these styles in the context of their embedded situations (epistemic cognition). Lastly, because late adolescence is the starting point to develop such cognitive and metacognitive skills, our learners would have some level of ability to engage in these activities, and ideally, could better build these skills with the Artstander project. A common way of enhancing students' metacognitive

skills is to encourage self-reflection. In Dixon (2009)'s study about the effectiveness of reflective video journals as a tool to increase adolescents' metacognition, he found that adolescents need specific instructions to guide their decisions of what to include in their reflective video journals, and proposed a model for facilitating reflective journaling into daily classroom practice. As a result, when attempting to foster self-reflection, the design of scaffolding should be taken into account.

2.2.2 Psychological & affective

Fading egocentrism. Young adolescents are known to be egocentric. According to Elkind (1967), young adolescents are concerned with their own appearances and behaviors, and they believe that they would be the center of attention, meaning that others would pay attention to and judge them just as much as they themselves do. In other words, "the adolescent is continually constructing, or reacting to, an imaginary audience" (p. 1030). As a result, they are always performing, and act like they are being watched by others. Normally, by the age of 15-16, this adolescent egocentrism would begin to fade away. So even with our youngest Artstanders, they begin to care less about themselves, and more about the outside world.

Moral autonomy. Adolescence is characterized by "moral autonomy", which is the capacity to impose the moral law on oneself, as suggested by Piaget. Adolescents progress toward a state of self-governance and they lead their own lives according to values, desires and reasons (Muuss, 1976). Kolhberg took a step further by defining three levels of moral development. Adolescents typically shift from preconventional level, at which morality is externally controlled by parents and teachers, to conventional and postconventional levels, where adolescents begin to understand social systems and laws and to question the morality of established authoritarian laws (Muuss, 1976).

Our interview also resonates with the above discussions. When asked about their thoughts on complicated issues about fashion (e.g. cultural, historical, ethical, moral), our five interviewees see them differently.

Some do not care about addressing societal or environmental issues from "the inside out" of their closets. One said that he enjoys seeing everyone express themselves creatively and freely through fashion, so nothing about fashion really bothers him, and he himself seldom pays attention to these factors when making his own decisions, unless the clothing explicitly shows some messages like the printing on a T-shirt. Another interviewee thinks that wearing certain clothes *"doesn't necessarily mean you are a supporter of their cultures"*, and people should have the freedom as long as they feel the clothes look good on them.

Some have mixed feelings towards these issues. One interviewee told her tortuous experience with the brand Brandy Melville, which presented an ongoing and internal struggle:

> *I hate how BM has the 'one-size' body-shaming mindset, but then when I actually stepped into the store, I couldn't help being attracted by its cuteness and discounted price, so I still bought some. It felt awkward because I'm wearing it but I also feel disgusted with it. However, later I heard about how they are racist to Black people, then I got so mad that I eventually stopped buying it.*

Other interviewees take a firmer attitude. One interviewee that is originally from China tends to avoid buying Japanese brands due to historical considerations. Similarly, "Olive", who is white and from the borough of Brooklyn in New York City, was adamant in expressing herself as a "conscious shopper" so that her wardrobe was not only compiled from personal preferences, but also with her community and the environment in mind:

> *You think about Shein and Fashion Nova and how influencers show their hauls when they're actually really, really bad for the environment. I thrift. Like, I go to Goodwill, second hand stores. DePop is a great invention, because you can find so many secondhand clothes there. And more brands that are clear on where they come from, like Aritzia, although this is also possible because of my socioeconomic status and that stuff is expensive… But there's a line I don't cross. My friend once bought a little girl's shirt at Goodwill, like a kid's shirt, and cut it into a crop top for herself. Like, no! Goodwill is not geared toward teenage girls of higher socioeconomic status, but for lower-income families, so I don't want to take that resource away from them. I have the privilege and luxury to not shop fast fashion. Thrifting is not being glorified by social media, which, I guess, is a good thing, but… also, it's a thing of, like, taking away clothing from people who need it probably more than us.*

Between luxury and non-luxury items, however, former socioeconomic lines are blurring with Gen Z in comparison to their millennial counterparts at the same age. Adolescents seek positivity, uniqueness and influence in luxury brands, while innovativeness can mediate these relations (Gentina et al., 2016). While Gen Z prioritizes practicality and durability over frippery, they do make their preferences known between comfort and status with the mainstream emergence of streetwear in the 2010s and its enduring influence over old-world luxury:

> *"I don't care about luxury brands at all… I don't like their styles. If my eyes are not happy, then I'm not gonna buy it. Most people my age don't feel the need to show off they have money, because they are comfortable with the fact that they do. There was a Yeezy phase. During the initial drop, and everyone was like, OMG I can't believe they actually got Yeezys. Who does that?! Big name brands don't have any value to me when they're contemporary… The vintage stuff is cooler, because they're historical."*

2.2.3 Social relationships

As people progress towards adolescence, they involve group identification who share a similar image or reputation among peers and form coherent and integrated social networks (Brown, 2004). Adolescents's choices of actions are often associated with the social groups they are involved in.

Social media is also a natural space for young audiences to seek advice and validation from their peers and communities (Bailey et al., 2021). In Uses and Gratification Theory (Katz et al., 1973; Ruggiero, 2000), user motivation and intention plays a large part in why, and for what purposes, audiences engage with mass communications-- extending from older media such as television and newspapers to the World Wide Web, social media, and food delivery apps.

Through researched posts and individual attitudes accordingly on Twitter, it is shown that social media is leveraged for self-expression among users and can generate both favorable and accurate perceptions, and it is beginning to shed light on how to curate such perceptions (Orehek et al., 2017), motivating people to express more on the platform. This holds implications for audiences as they assume direction and ownership through their active roles in consuming and interacting with their feeds and community content. Calder and Malthouse (2008) further note that experience refers to consumers' set of beliefs about media brand relation to their lives; their communities are classified, binary and capsuled, and while younger teenagers relish the opportunities to recreate continuously a highly-decorated, stylistically-elaborate identity, older teenagers favour a plain aesthetic that foregrounds their links to others, thus expressing a notion of identity lived through authentic relationships. The article further contrasts teenagers' graded conception of "friends" with the binary classification of social networking sites, this being one of several means by which online privacy is shaped and undermined by the affordances of these sites (Livingstone, 2008). Self-expression on social media platforms is mainly motivated by keeping in touch with friends and observing others' life, thereby gaining the approval of peers through recording their own life experiences (Rodriguez, 2014).

Adolescent friendships have both positive and negative perspectives. The positive effects of intimate friendships include increased self-esteem, understanding of people and possibility to mimic positive actions of their peers. The second theoretical perspective emphasizes the negative effects, such as undesirable attitudes and consequences (Berndt, 1992). Artstander provides teens with the opportunity to connect with peers who share the same interests in arts, fashion, design, and social media trends, as well as forms a safe and respectful community for both intellectual conversations to happen. We want to encourage healthy friendships where adolescents can have a positive influence on each other.

2.2.4 Media usage: digital natives

Gen Z are digital natives who are immersed in mobile devices with countless sources. In the specific field of fashion, social media has become one of the most common sources for fashion information for teenagers. When asked about how they usually come into contact with fashion trends, four out of our five interviewees answered with names of popular social media (e.g. TikTok, Instagram, and RED, among a few others). They learn from posts of influencers, celebrities, magazines, general fashion accounts, as well as their peers. Though they receive such information on social media, some of them tend to stick to their own style: *"Actually I never try styles on social media. Because I think that's their style, not mine. I tend to wear sports clothes as it is more comfortable rather than dress clothes."*

Some adolescents would also be cautious when speaking up online for they know clearly about the potential risks of social media, One interviewee runs her own social media account with 266K followers, and she admits that fashion could sometimes be a very sensitive topic. *"A friend of mine recently posted about Nike, and she received so many hate comments because of the Xinjiang Cotton issue. I'm also super careful about the brand that I'm posting now."*

Compared to interviewees who are not influencers themselves, she shows a greater level of carefulness in the content she chooses to post publicly.

Despite their familiarity with and regular usage of social media platforms, young audiences exhibit a disconnect between their expectations of how they view diverse feeds of information and the results of self-regulation on these feeds, as seen in a study of eye-tracking on Facebook feeds among a sample population of college students (Vraga et al., 2016). While self-regulation is a pertinent methodological approach to gauging how audiences interact with their social media feeds, the limitations are plentiful: eye-tracking has exposed the realities of audiences failing to accurately report the extent to which their feeds are not diversified, and therefore "communication research must go beyond self-reports to precisely understand exposure and attention to content in social media" (p. 160). The study also shows that posts with pictures would attract more attention than text-only posts, and political posts in general receive the least attention(people on average only spent 4 sec on each political post, which is 25% less time than on news and social posts). From that, we could argue that adolescents might tend to focus on more visual-oriented content while neglecting information about politics on social media. To conclude, while they are fluent with these platforms, they also are not that sensitive about the information anymore.

3. Learning Context

3.1 Spatial and temporal context

The Artstander curriculum is primarily designed to take place in a museum setting, but with specifications: this museum would have its own or access to archival garment collections, such as the Ratti Textile Center and Costume Institute at the Metropolitan Museum of Art and The Museum at FIT, and/or fashion historical exhibitions such as those made available by the Brooklyn Museum (which is currently exhibiting archival collections from Christian Dior utilizing a transatlantic narrative). In these manners, the museum provides instructional facilities and a key learning environment through which audiences can not only view, but interact with historical artifacts as a means of their own storytelling and sharing (Weilenmann et al., 2013). Considering a site's specificity emphasizes local awareness and traditions as a site for cultural sustainability (Thanapornsangsuth & Holbert, 2020); furthermore, in considering the archive not as an artifact but as a system, the museum becomes a place to sustain and archive community contribution (Gould, 2013).

While museums as cultural institutions have long been silent on their origins (Edwards et al., 2006) and complicity (Ng et al., 2017) in establishing imperialist, colonialist, and oppressive principles, it is for this reason that programming like Artstander's are pivotal in addressing their legacy: in fostering empathetic individuals who have a clear sense of their own identities and perceive and respond effectively to the experience of others, the empathetic museum must similarly have a clear vision of its role as a public institution within its community (Ng et al., 2017). In order to bridge the ideas of institution, community, and empathy, Artstander looks to

social media as a network, space and tool by which audiences, as both learners and consumers, can establish their sense of self as well as hone their criticality by interacting with and taking a deeper look at both offline and online artifacts. It is no accident that Artstander's curriculum is very much inspired by a paid internship opportunity presented in an existing teen program housed in a museum.

3.1.1 Why and How Social Media Can Contribute

Our project will mainly leverage social media as a learning medium for conducting individual research, expressing perspectives, documenting learning materials, experiences and communicating with each other. Social media is conducive to learning as a network, space and tool through which learners make knowledge their own. In tying the museum learning environment with the online learning experience and community, Artstander explores different aspects and contextual affordances and constraints presented by social media platforms as learning opportunities for *learners as ethical consumers*. Nevertheless, barriers exist for social media learning that have decentralizing effects, may lack interactions between learners (users) and instructors (creators), and lead to unmoderated conversations that result in misconceptions.

3.1.2 Social Media as a Network

As a network, social media shows possibilities in conveying information through interaction and interactivity, whereas self-paced learning happens and instructions are expected. Dogmagk, Schwartz and Plass (2010) define interactivity by its closeness to and reliance on reciprocity in the sense that it "requires two fundamental conditions: (a) at least two participants must interact with each other, and (b) the actions of these participants must include an element of reciprocity. Reciprocity means that change occurs on both sides" (p. 1025). The most important factor to dwell on here is that of learner control, as online learners are not passive but very much active in their communications and understanding of the online community. The INTERACT model as proposed by Dogmagk, Schwartz and Plass highlights the interrelation of learner characteristics in the interactive process, and how "they can affect the way an interactive feature is actually used and the cognitive processes in which a learner engages" (p. 1027). This intertwining of cognition, motivation, and emotion emphasizes the need for such an integrated model, as it encompasses the various states through which learning occurs. It is up to the instructional designer to take this into account with the use of such a model as a guide, but they cannot forget that emotional and motivational states are not only conditions, but also can potentially be "products as well as inputs into the interactive process" (p. 1028). In this vein, Collins, Neville and Bielaczyc (2000) identify transmission, recording, production and social characteristics of computer networks as media; namely, as means to connect individuals into communities of interest rather than communities of place, and to support them "becoming producers of material, as well as consumers".

Specifically to the fashion realm, social media including Instagram offered a network space for documenting daily lives and reciprocally receiving feedback as creators, which enabled

the advent of "mega influencers" who landed careers based on high numbers of interactions (Suh, 2020).

3.1.3 Social Media as a Learning Space

One of the most empowering prospects of creating a self on social media is that it presents the learner with the opportunity to *be* and to *create*. Learners learn from each other, however informally and marginally. With the learning goals and objectives leading to meaning-making construction through the creation of artifacts, instructional designers can empower students to utilize social media to further their understanding of the self in both online and offline capacities in a reflective and metacognitive learning process and environment.

Now on social media, fashion has become an everyday occurrence of stylistic statement (Suh, 2020) as well as a means through which individuals who have amassed large online followings, dubbed *influencers*, have adopted a role that is a cross between creator, aspirational model, and informal mentor (Choi, 2019), an amalgamation of social identities that has, in turn, been primed by existing patterns of adolescent fashion consumerism in in-person shopping (Chen-Yu et al., 2009). Leading up to forms and methods of online consumerism today, social media has made different kinds of community, mentorship and informal learning space available for younger audiences to make their own decisions as to what to wear and what images they prefer to perpetuate and adopt for their own purposes.

A deeper look at David R. Krathwohl's two-dimensional reworking of Bloom's Taxonomy as a framework (2002) is warranted here. Knowledge comes in many forms, and none are made concrete until that knowledge is utilized and contextualized for the learner. In designing learning goals and objectives using a social media platform as an engine for exposure, research and participation and/or creation, the designer activates the Conceptual Knowledge in the Knowledge dimension of the revised Taxonomy by facilitating student inquiry into "patterns and relationships of ideas, topics, or themes" (p. 216). Through teacher/mentor facilitation and guidance, peer review and discussion, and reflection it is apparent that within Krathwohl's Creation, learning is internalized, socialized, and appropriated in a meaningful and productive cycle that enriches the learning community at hand.

3.1.4 Social Media as a Learning Tool

Social media is pervading in our daily life, which provides a basis for reaching learners and creating influences. According to the survey, 65 percent of online adults used social media networks in 2011 (Madden & Zickuhr, 2011), and this number is expected to rise. As a tool, social media supports learner communities, sharing content and training prior to learning, informal learning, feedback, accessibility and reach for a large number of learners, support for metacognition, and accessibility across time and space.

The general capabilities of social media for both adults and adolescents are only broadening in scope. For youngsters, social media is primarily employed for communication and entertainment while obscuring the line between consumption and creation, enabling them to

create as a reflection of self-obsession (Huntley, 2020). The naturally formed communities and feedback from each other through the *reply function* also assist in constructing *self-identity* (Gündüz, 2017) and *social cognition*. Learners can obtain metacognition by participating in community discussions and reviewing records. Taking these affordances into consideration, it is important to note that social media is a tool for collaboration: it enables learner collaboration through commenting, sharing, and discussion behaviors (Thota, 2015), as well as a mutual exchange of knowledge. The emphasis shifts from information presentation to communication, from passive learning to inquiry-based learning and active participation, and from individual learners to learning in community.

As learners negotiate meaning on their own terms (Collins, Neville and Bielaczyc, 2000), social media extends classroom boundaries (Dennen & Rutledge, 2018) and allows for their use as tools to communicate and connect beyond traditional spaces and maintain various networks. With proper facilitation and motivational efforts for learners to find and define their own problems and solutions that are relevant to them— perhaps through a constructivist approach to teaching and learning— instruction evokes the spiral of transformation (Gündüz, 2017) in which digital creation transcends online into IRL ("in real life") practice.

3.1.5 Constraints

However, there are potential limitations in employing social media for learning. They are identified for lacking direct interaction with creator and consumer and lacking control on the flow of discussion. Studying solely via videos or films lacks interaction for learners (Collins & Halverson, 2018). As a result, when using social media for learning, instructors are expected to provide instructions and text content along with it as a multimodal means to engage and to scaffold. Also, the decentralizing impact of social media in education occurs when participants bring random events into the discussion that cause the attention to shift (Hoffman, 2009). There are further disruptive forces that make it difficult for learners to focus on their learning tasks when they are interrupted by irrelevant encounters (Rosen et al., 2013).

Furthermore, the use of social media in art education and in fashion education has been limited to visual and often informal forms, such as content seen on Instagram. While art forms and fashion content are extremely popular on social media, appearing in a variety of popular culture forms like fashion, movies, music, photography, and so on (Burns, 2009), disadvantages exist-- a notable one of which is that individuals learning about art and fashion via social media have doubts about the legitimacy, authorship, and authority of the content (Sweeny, 2009), oftentimes due to the perceived subjectivity of the topics. This can, in turn, potentially lead to an increasing awareness of credible sources, and/or sustained *critical literacy* on social media. As a result, the potential for using social media to connect art form with fashion content is vast, and heritage sites that have extensive collections of historical artifacts that relate to both trade and trend of their times have similarly growing potential to be learnt from on social media.

3.2 Technical context

As such, while the lectures, discussions and speaker talks will take place in a museum setting, the literary research, the design of social media posts, the submission of reflections and designs, and the project showcase will be delivered online. The tablets and laptops will have wireless Internet access and a large enough GPU to allow for multimedia information transmission. Tablets and laptops should have built-in audio sensors and speakers which allow video playing and livestream video meetings. For adolescents, as most of them have used laptops in high school, they will not be intimidated and discouraged by the technical barrier.

In Artstander, Discord is used for community research findings and asynchronous change, social media is used for student research and projects, media production software is used for post design, and a web interface is designed for resulting portfolio of student work and curriculum outline. The choice of a combination of multiple social media platforms and a web-based interface is to allow users freedom to choose the medium they are familiar with and to showcase their resulting portfolio in a more long-lasting way.

4. Learning Goal and Objectives

Artstander's primary learning goal is for students to acquire basic fashion knowledge, procure research and critical capabilities, and express their own viewpoints through their own content creation social media.

The learning goal provides a general guideline for developing Artsander's instructional design whereas learning objectives specificies subordinate skills that will be gained during the learning process. In the curriculum design and programming, we aim to address the "ABCDs" of learning objectives (Audience, Behavior, Conditions, and Degree) as detailed by Heinrich et al., (2002). We also referred to the revisions of Bloom's taxonomy (Krathwohl, 2002), for our program's objectives to dabble into three domains including the cognitive, affective and psychomotor. Gagne's (1985) hierarchy of intellectual skills divides knowledge into declarative knowledge, procedural knowledge, and affective knowledge, which also offers guidance.

As such, Artstander's primary learning goal is for students to acquire basic fashion knowledge, procure critical capabilities, and express their own viewpoints through their own content creation. The curriculum experience breaks this larger goal down to objectivizing three roles the students play in their own cognitive development. In style of the revised Bloom's Taxonomy and Gagne's hierarchy of intellectual skills, we situate each Artstander as the Researcher who analyzes information from multiple sources, the Critic who argues their case for actionable solutions to their problems in deeper and contextualized understanding, and the Creator who synthesizes their argument and puts it forward in a public sphere. These roles encapsulate our goals and the attitudes and skills we aim for our students to exit with.

Below is a chart outlining Artstander's goals, objectives, and justifications week by week along the 5-week curriculum.

Week & Lesson Plan	Goals & Justification	Objectives
Week 1: Artifact Mind Mapping	The main purpose of this first lesson in the Artstander curriculum is to introduce inquiry-based processing. In this lesson, we initialize the thought process behind exploring what we wear, why and why what we wear matters in a sociocultural context.	Students introduce themselves and the artifacts they care about. Students familiarize themselves with the Artstander Discord server.
Week 2: Lived Experience & Consumerism	Students connect their prior personal experiences to approach cultural and ethical aspects of fashion, learn about cultural appropriation and ethical consumerism, and learn research methods and resources for their future design projects.	Students become familiar with research methods and are introduced to an SME who is experienced with amalgamating style with message.
Week 3: Inquiry-Based Design	This project-based "studio" week focuses on the student creation process as they amalgamate their research and argument into social media content. This is the week of the *why* and *how* of their projects.	Students are shown frameworks and guided through their research content to synthesize the information into meaningful messaging.
Week 4: Iteration & Presentation	Students learn from each other and provide feedback to the community in regards to their problems, solutions, and communication methods to further instill a practice of communal critique.	As active critical creators, students are now challenged to explore different social media platforms and choose one for their project.
Week 5: Museum Take-Over Carousel	The curriculum concludes with a shift of student lines of inquiry back to the museum as the host institution and as a site in which they can question dominant narratives.	Students connect their inquiry to the host museum's collections in a #takeover for public viewing, thus exhibiting their work.

5. Review of competing projects

5.1 Existing competing projects

5.1.1 Spatial and temporal forms

Some projects, such as Parsons' certificate program, are entirely online. These projects are ideal for those with a hectic schedule and specific goals because they offer flexible, self-paced learning opportunities (e.g. unlimited access to video resources within 1 year). Yet, they place extra demands on learners' self-control and perseverance, as well as sacrificing the potential for social connections and community-based learning to some level.

Other in-person or hybrid programs, on the other hand, organize field trips, group projects, and SMEs/guest speaker sessions to make full use of offline, contextual, authentic experiences. Some of the projects, such as Fashions Camp NYC, are entirely in-person and intensive, requiring learners to come together for 1-2 weeks to complete the entire camp. Others, like the Teen Advisory Board (TAB) program at the Isamu Noguchi Foundation Museum and Gardens, are hybrid and time-stretched, with learners meeting every week and working asynchronously between sessions for a half-year. The former could provide a more seamless and consistent learning experience, as well as a more diversified learner group from different locations and even nations, whereas the latter allows students to delve deeper into the topic area and may promote greater transfer into their daily life.

5.1.2 Areas of focus

The majority of fashion-related projects emphasize industry knowledge and career-related skills such as design, styling, marketing, and media production. It's worth noting that social media abilities, such as how to create long-term personal brands and self-promote, are highly recognized in these programs. However, none of the fashion programs brings in the critical analysis of trends from a cultural/ethical/social economic perspective. The only program we found that does address this issue is TAB, which strives to promote "dialogue and inclusivity" but is not necessarily about fashion. Apart from a substantial content focus on the fashion business, projects aimed at teens put a stronger emphasis on a sense of community and peer collaboration. They see their program as a great opportunity for teens to know and learn from each other, as well as form lifelong connections.

5.1.3 Efforts to learn and help the participants

Some programs employ surveys to learn more about their participants' technological access, motivation to engage, expectations for the program, and past expertise. Extrinsic rewards, such as certification and prospective professional connections, are also used by many programs to motivate learners to participate and stick with them. A more unique example is TAB, which has formed partnerships with funds and the government in order to gain more support and long-term influence, and thus be able to reward participants financially for their efforts and valuable work, which could be a great motivator for teens who cannot afford to attend expensive summer camps.

Project	Description	Content	Forms	Outcomes	Others
Fashion camp NYC	**General:** A one-week long, Manhattan-based in-person summer day camp(9:30am-4:30pm), typically accepting 25 teenagers from 12-18. **2 levels:** Fashion prep for grade 6-8; Fashion forward for grade 9 – 12. Each costs $1,200. **Team:** Founded by a brand executive and a camp director; run by a faculty of directors, magazine editors, runway show judges, stylists, bloggers, entrepreneurs, along with other trained counselors	**Focus:** Retail fashion, industrial insight, business sense, positions and career paths **Components:** Fashion styling; Retail buying and merchandising Journalism, PR and Blogging; Fashion technology (e.g. textile, apparel and garment design); Fashion photography Brand management (e.g. positioning, segmentation)	**Hands-on activities:** Presentations, projects, portfolio **Lecture:** Guest speakers sessions **Tours:** Behind-the-scene field trips, office visits	**Career:** Internships, connections to the industry, employment at significant jobs in the retail fashion industry **Academic:** Acceptance to top fashion programs and liberal arts schools **Social:** Make friends from all over the world	**Consideration in FAQs:** "Where should kids and parents from out of town stay?"
Teen Advisory Board (TAB) at The Noguchi Museum	A paid internship for high school students, aims to promote dialogue and inclusivity at the Museum. It is supported mainly by The Pierre and Tana Matisse Foundation, and in part by public funds from the New York City Department of Cultural Affairs.	This year (2021.11-2022.5), students would learn about museum structure and the social role of art, and collaborate on a project about anti-racism and the establishment of art museums.	2-hour in-person meeting every week	**Financial reward:** $750 **Social:** Outreach directly with surrounding communities and families; attuning communities into relevant activism (in locality). Community in the museum	**Application form:** Questions about technical access, motivation to participate, expectation, and prior knowledge **Partnership:** It is also in partnership with the City Council and from the New York State Council on the Arts with the support of the Office of the Governor and the New York State Legislature.
Fashion Industry Essentials -- Parsons	An career-focused, online certificate program ($999) created by Parsons faculty, Teen Vogue, and featuring industry	Build fashion industry skills and expertise in key areas such as: Visual styling, Portfolio design,	**Course modules:** 5 course modules and skill-building activities.	**Certification:** A non-credit certificate of completion from Parsons.	**Flexibility:** Online, on-demand, self-paced. Each module is 3-5 hours, and is broken into shorter lessons that students complete at their own pace.

Fashion Certificate	experts. Targeting at 13+ students. Designed for students at any stage of their academic or professional experience and with the potential for many different outcomes.	Fashion production, Marketing, Media and PR Develop greater understanding of how the fashion industry works .	**Self-paced projects and assignments**	**Career opportunities:** Get first-hand tips and advice on how to achieve career goals from the biggest names in the business.	Materials are not downloadable, but learners have unlimited access for 12 months.
Man Repeller Summer Sleepaway Camp	Repeller "was founded in 2010 as a blog about style trends women love and men hate. It has evolved a lot in the decade since, growing into a unique media brand". In 2017, they organized a weekend sleepaway camp for young girls who are online friends that are connected by this blog.	"Find a safe and cozy place to be ourselves together" "Made the digital-to-IRL transition"	**Customized schedules:** Yoga, mediation, campfires, arts and crafts, swimming, rock-climbing, ropes course activities, talent show...	"Sisterhood"	**Materials:** brochures, maps... **Environment:** animal-themed cabin lovingly decorated by furniture...

## 5.2 The need for innovation
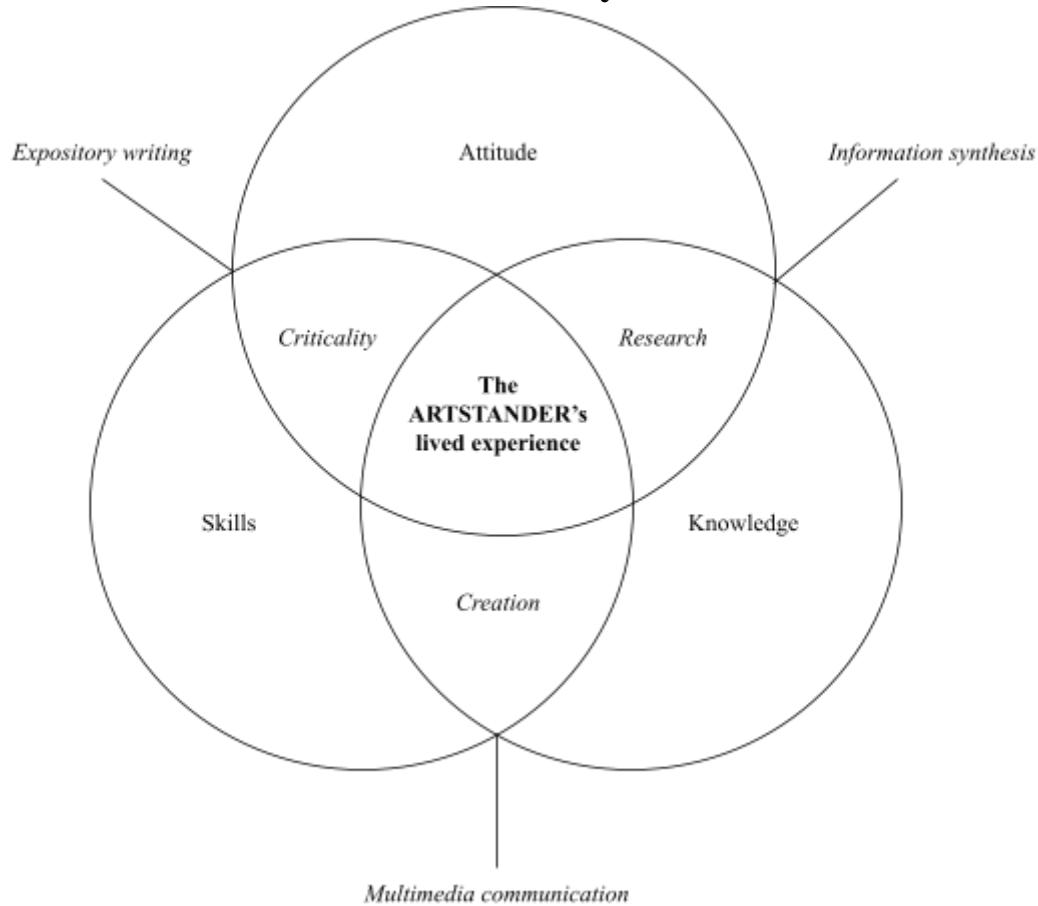
As the strong relationship between social media and fashion is anchored and demonstrated in our analysis, and less practices are executed to address it, Artstander originally recognized it and found a novel space for learning fashion knowledge. Rather than using social media solely as a platform for sharing in other fashion workshops, Artstander saw it as a means of provoking deeper questions about the cultural, ethical, and socioeconomic fashion topics, conducting research, and expressing personal perspectives in order to shape new identities, as well as a self-branding tool through portfolio building. Furthermore, the majority of the aforementioned seminars focus on offline skills such as sewing and designing, rather than inspiring students to explore deeper ideas beneath the surface. Artstander, on the other hand, is considering inspiring learners to recognize and critically think about social phenomena and fashion knowledge, which will be a long-term talent and mindset for them.

Adolescence is a vital stage of constructing self-identities, exerting long-term influence for later lives. Outwearing is demonstrated as a way to represent identity and thereby Artstander will aid adolescents in this aspect through garnering insightful considerations. For learners who are eager to build portfolios for further college application or self-branding, Artstander can offer instruction and a safety expremeting place for them to practice.

For the Museum, Artstander will serve as a marketing channel for disseminating trustworthy information on fashion topics and growing the museum's reach through various contents created by our students and the hashtags associated with them.

Design

1. **Content analysis**

      Schwartz and Hartman ([2007](#)) expand on distinguishing between target areas and outcomes of learning and internalization, as exhibited by different behaviors and channels of externalization (perception speech, etc.). Artstander engages three main target areas of learning and cognitive development: *attitude*, *knowledge*, and *skills*.

      To better gauge how Artstander helps develop the student capacity to change their existing attitudes toward fashion and fashion's ethical considerations with exposure to inquiry-based project making, we must first expand upon a starting statement that *fashion is a complicated area that is worth exploring*. Fashion is more than aesthetics. It has deep cultural, ethical, socio-economic roots and contextual factors that are constantly influencing their meanings. Seeing fashion through these lenses could give us an opportunity to re-discover these styles and trends. On the other hand, using fashion as an entry point, we could also explore some cultural/historical/social issues from a new and intriguing way. Fashion therefore can serve as a powerful tool to outwardly express identity and thoughts. It is with this understanding that both

instructors and students must acknowledge that *people's attitudes towards fashion are also complicated.* How we see fashion is also influenced by such cultural, ethical, and social-economic factors. People might have distinct perspectives on the same phenomenon based on their own backgrounds. If any Artstander gains from *thinking critically and being open to communication and co-construction*, it is important to think critically about this subject matter based on grounded and comprehensive research. It is through this line of thinking that Artstanders should always be *open to hear about others' opinions and understand their standpoints*. Be ready to reflect on our own mindset and open for the possibility of co-construction of new knowledge. In the end goal to have Artstanders *speak up through social media and IRL about fashion to a wider public*, they must acknowledge and develop their voices on social media and *be mindful* to do it in an appropriate and respectful manner.

Three categories of actionable awareness, or *knowledge*, come to mind specifically entwined with issues in fashion as explored in the Artstander curriculum: cultural (e.g. cultural costuming, garment history— an example could be Diet Prada's exposé on attitudes toward women of East Asian descent in "Wuhan girls, wahoo!"), ethical (e.g. how fashion brands react to certain events and issues— an example could be the racially fraught consumption of fur and animal products in America), and social-economic (e.g. fast fashion, thrifting— an example could be an exploration of labor practices and professional environments within fashion business models as discussed in Chavan (2018). This knowledge is closely linked to the *skills* Artstanders develop as researchers, critics and creators: through the different kinds of research they conduct and data they analyze, methodology of media production they pursue for their projects, projects and expression in expository writing and solid foundations in argumentation, copywriting skills required to build such arguments, and finally the overall coordination on social media platforms (i.e. running the account).

2. Media selection

2.1 Description of the media

While the advantages of social media in learning have been extensively investigated and acknowledged, the use of social media in art education has been limited. However, as an art form, it is extremely popular on social media, appearing in a variety of popular culture forms like fashion, movies, music, photography, and so on (Burns, 2009). In this sense, fashion has become a favorable topic on social media platforms worldwide due to the marketing practices from brands and high engagement transactions. On average, fashion brands posted 0.96 posts on Instagram per day and generated a 0.68 percent engagement rate per post, which was a higher engagement rate than on Facebook or Twitter.

Young people are avid users of social media and have appeared as a powerful force for social change. Building a personal brand in today's world, where technology and social platforms are redefining how people interact, has become a necessity, especially for the young generation Z, who are increasingly engaged in online activities (Viţelar, 2019). The majority (97%) of Gen

Z consumers say they now use social media as their top source of shopping inspiration (Kastenholz, 2021).

As a result, the potential for using social media for fashion education among adolescents is vast. Our project will leverage the large numbers of adolescents on social media and their interests in fashion topics to design and implement learning experiences. Artstander identifies social media platforms as the main space for students to participate in research, discussion, sharing and evaluation regarding their projects while Discord is leveraged for a connected space where instructions, reflection and in-class interactions exist. It is important here to distinguish between 1) the media we are using from the instructional technology side, namely Google Suite and Discord, and 2) the media students will utilize as tools of empowerment and communication, which also includes Discord.

Artstander utilizes Discord as a space for "social connectivity and participation for networked communities", an affordances offered by Web 2.0 tools (McLoughlin & Lee, 2008) for its asynchronous work between in person meetings The interface organization and structure aids socialized online learning and interaction in its server and customizable categories of text channels, including liveness (Weilenmann et al., 2013) in these interactions through chat and voice lounges. It is important to note here that Artstander specifically chose Discord not only due to its powerful functionality in comparison to similar online spaces such as Slack or Canvas, but also for its perceived informality as a space originally utilized for gaming information exchange and its familiarity to and existing usage among interest groups in our target audience. The space aims to be one of sharing information, perspective and inquiry regarding artifacts found in informal social media, rather than a wholly formal and constricting academic environment.

2.2 Why was the media selected?

In our earlier considerations of the spatial and temporal contexts of Artstander's instructional design, we have expanded on social media as a network, space, and tool in our research of the learning environment and learner context. While these three approaches to social media are more broad and general in nature, it is important to note that Artstander's curriculum stems from existing and evolving social media practices exhibited by our target learner audience (Purcell et al., 2017), teenagers aged 15-18. With this in mind, we have opted for a social media-specific methodology through which the Artstander programming can be adapted and utilized for future learning and instructional consideration by choosing four relevant social media platforms to explore as conduits of inquiry and actionable problem-solving.
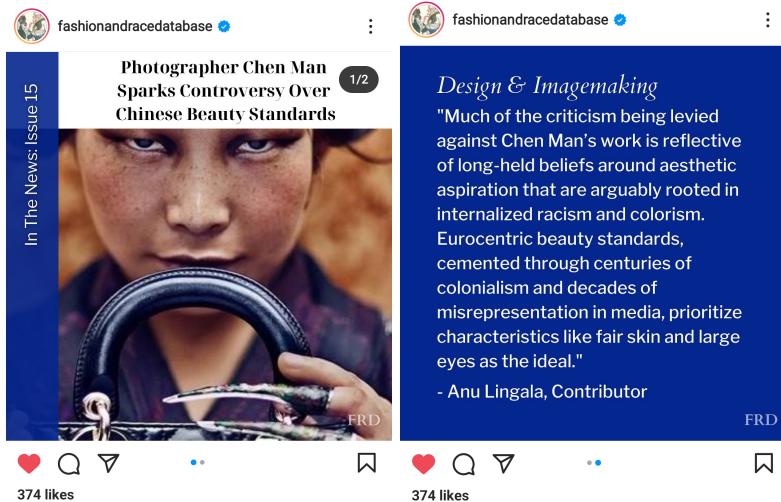
To better situate both our research and projected learners in social media-based inquiry and solutioning, we have chosen **Instagram**, **TikTok**, **WeChat** and **RED** based on their heavily featured reliance on and the exhibited relevance of fashion and fashion-related content on both sides of creation and consumption. While YouTube was the most used social media app among teens in 2019, followed by Instagram and Snapchat according to Statista, we have found through existing literature and our own qualitative research that these four platforms provide relevant case studies and actionable insights as to how adolescent learners absorb, learn from and utilize

social media for their own means and to their own ends of argumentation and self-expression. It is also important to note that these platforms are used internationally and that our study and methodology is not geared toward Americentric inquiry and discourse.

2.2.1 Instagram

Instagram is a software application that transmits information in the form of text, photos, and videos. These representation types can offer learners a record of their study materials and performance, allowing for reflection and metacognition (Collins, 2000). Instagram is also an open public platform where anyone may post whatever they want, allowing for a wide range of content to be made. As a more visually-oriented platform in comparison to its more text-heavy competitors such as Facebook and Reddit, Instagram also exhibits affordances in learning "from looking" and therefore in *looking as being*. From a semi-experimental approach investigation, when middle school students engage in creative learning of graphic design, the Instagram-assisted group performance exceeded the problem-based learning group (Salehudin et al., 2019). Students are familiar with Instagram and use it to share images, videos and update status in the learning process, greatly facilitating interactions. These abundant resources can provide opportunities for users to conduct research, as well as find ample material using geotags, hashtags, and browsing the Explore feed.

Fashion engagement is high on Instagram. In 2019, fashion brands performed best on photo-sharing platform Instagram. On average, fashion brands posted 0.96 posts on Instagram per day and generated a [0.68 percent engagement](#) rate per post, which was a higher engagement rate than on Facebook or Twitter. It is also important to note that *fashion* and *lifestyle* have become analogous to each other on Instagram, a carry-over from when influencers previously active on individual blog pages made their shift to Instagram but continued creating #OOTD and #throwback content chronicling their everyday lives (Suh, 2020). Instagram influencers and accounts can act as informal resources of information from which their followers can learn about fashion, the history of fashions and the cultures from which they originated, and cultural sustainability through these artifacts so long as sources are cited, checked and also researched, however informally. Prominent examples of social media-based activism situated in Instagram as a learning platform include [Alok Vaid-Menon](#), a nonbinary and genderqueer artist, performer and poet, whose approach is more poetry and academically oriented, and [Dr. Ericka Hart](#), whose content is tailored to include much more of her lived experiences as a queer and post-traditional academician and cancer survivor. [The Fashion and Race Database](#) similarly works as a collective on subversive research and interpretation of modern and contemporary fashion.

Artstander guides learners into identifying a problem and addressing it, thereby developing their own online voice as activists-- extending to IRL practice so as to move beyond the black square virality of "slacktivism" (Corbett, 2021). Existing forms of Instagram intervention include infographics (Nguyen, 2020), accounts tailored to population-specific content to address (mis/under)representation (Stanley, 2019), and purposeful use of the platform for as impetus for developing a "citizenry of photography" for cultural activism (Palmer, 2020). For Artstanders in particular, we envision Instagram as a good platform for #artstandertakeover, an intern-led effort through which connections are made between contemporary fashion and/or fashion narratives with and the host museum's collections.
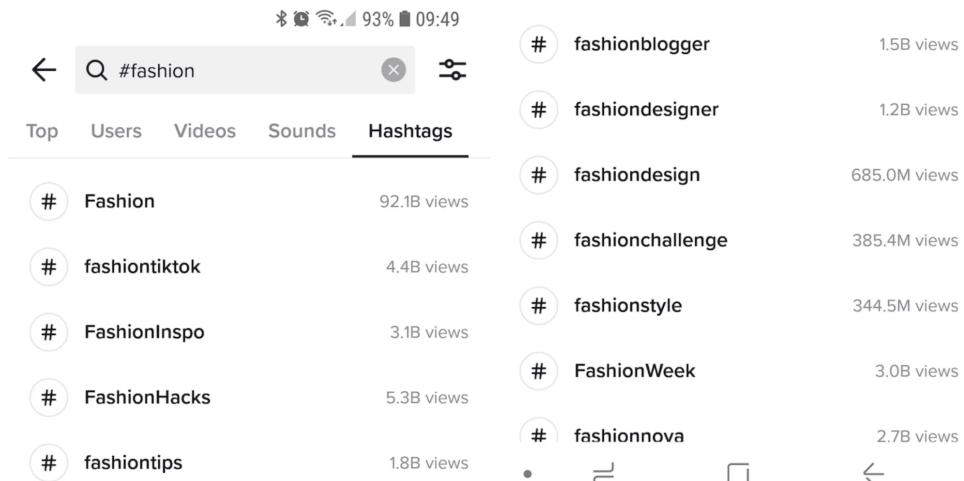

2.2.2 TikTok

TikTok became the fastest growing new app for American teens in 2019. 60% of TikTok users were ages 16 to 24, according to Business of Apps (Iqbal, 2021). TikTok is essentially a short video social media platform. People can jump to the next video by swiping their fingers across the screen. Tiktok creates a video stream that caters to everyone. The software's key feature is its recommendation algorithm, which allows users to see their favorite videos and trending content, thereby attracting and retaining users. In comparison to other social media platforms, TikTok mainly uses visual and auditory ways to convey information with less text. As more senses are triggered, the learner's cognitive abilities are reinforced.

TikTok is used in pedagogical practices to deliver messages in discrete learning units with a short time duration of fewer than 60 seconds (Khlaif & Salha, 2021). This will give credence to the idea of nano-learning, which is the condensing of microcontent into smaller components that learners control and deliver to fulfill a single learning goal (Chaka, 2009). Based on these traits, nano-learning may boost study efficiency. Besides, under one account, TikTok can also store study materials and feedback for later review under one account. It can also deliver a series of videos that cover various sub-topics. The brief time may be acknowledged as a way to reduce learners' anxiety when they are exposed to a new topic.

Fashion contents are trending on TikTok. In October 2020, TikTok initiated a fashion week to encourage sharing among users and influencers. Saint Laurent represented a runway show, while JW Anderson revealed its latest collection, and along the way, viewers can tune in for styling sessions hosted by popular creators like Wisdom Kaye and Ariam (Lee, 2020). Brands and Influencers are thriving through generating fashion contents on TikTok. Louis Vuitton is live-streaming fashion shows, in the meanwhile through postiving creative TikTok videos, models, designers, and other talents are recognized (Allaire, 2020). Kaye has attracted more 3.6 million followers, who flock to his videos to check out his looks and glean fashion tips. TikTok has become an outlet for self-expression and a new career boost platform for creators.

Hence, Artstanders will lead learners to inquiry and research fashion topics (hashtags) on TikTok, facilitating them to voice their perspectives through generating audio/video forms of posts.

2.2.3 Wechat

WeChat is a mobile text and messaging communication service app that has become the most influential social media platform in China. Besides messaging, WeChat has other functionalities that enable users to get first-hand information about fashion trends. Both individuals and established companies can register Official Accounts, which allow them to publish articles with text, photos, and videos and share to their followers. Not only do the biggest fashion Magazines such as Vogue, GQ and Elle and largest fashion brands such as Dior and Chanel have Official Accounts on WeChat, but also indie fashion bloggers, who share their outfits of the day. WeChat payment function also allows users to buy fashion within the app. According to a new report from market research firm Gartner L2, 60% of the fashion luxury brands it surveyed have at least one WeChat store, surging from just 36% in 2018 (Liao, 2019).

WeChat is also a place for information transmission which allows Mandarin users within the globe to integrate socially. As mentioned by Sun (2020), In many countries and regions, especially those with considerable size of Mandarin users, WeChat has been used for social integration. The most important social impact of WeChat may be to break the barriers of debate and dialogue between the first generation of Chinese immigrants and their children, between the political left and right in the diaspora Chinese community (Sun, 2020). For example, a Yale student Eileen Huang published an open letter on WeChat to Chinese parents in elder-generation, explaining racial and social stereotypes (Chineseamerican, 2020). WeChat has been a tool not only for messaging, but also for publicizing information within Chinese people globally, and it has the potential to facilitate social activism.

There have been existing examples of Chinese fashion customers actively against global fashion brands for their misuse of Chinese maps. In 2019, Dior made about its boutique network at Zhejiang Gongshang University, and misused the map of China, failing to show Taiwan as a part of China in the map (Reuters, 2019). The incident aroused anger from Chinese fashion customers and Dior made a public apology on WeChat, and the prompt official response played an important role in preventing the backlash from spreading more widely (Wu and Achim, 2019). From information given above, WeChat can be an ideal place for learners in ArtStander, given that it is a place for both receiving information about current fashion trends and issues, publicizing learners' own opinion, and connecting with fashion critics and fashion brands managers.
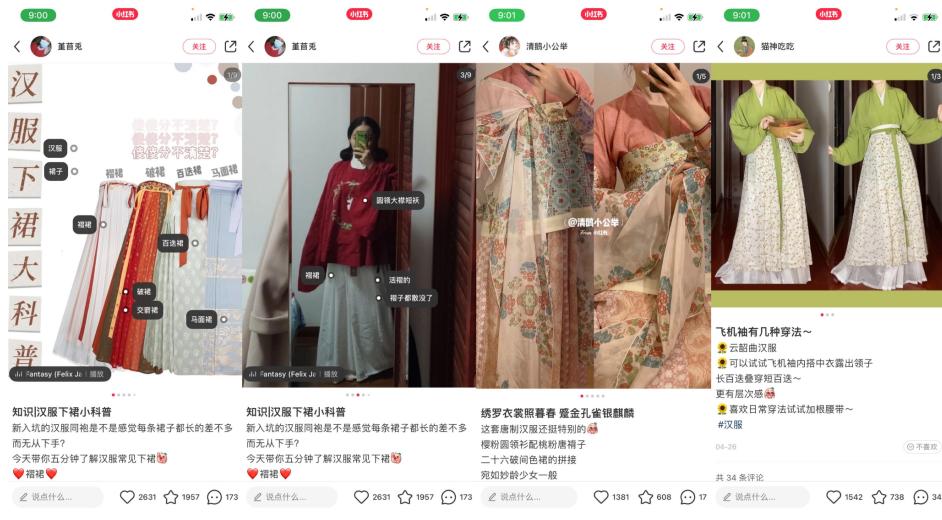
2.2.4 RED (Xiaohongshu)

RED (Xiaohongshu) is a Chinese mobile application about lifestyle sharing. Users post vlog (video blog) and plog (picture blog) to share their daily experiences about almost everything: beauty products, fashion, dining, food recipes, travel, study tips, sports and fitness, childcare, stories about their crushes/dates/relationships, and so on. It also offers in-app buying options, so users could just see it and buy it. Some see it as the Chinese version of Instagram, but RED differs for its strong sense of community. RED would push posts to users' main page from

not only influencers but also normal folks. Many users also share their ups and downs, as well as funny things that happened in their slice of everyday life, and leave encouraging comments under strangers' posts to cheer each other up. This intimacy between users, along with its high-quality visual content, lead to its popularity. According to its [official website](), its monthly active users surpassed 100 million in July 2020. A more recent user research from [Qiangua]() in 2021 shows that 58.23% of users are under the age of 24, while the majority are female.

When it comes to fashion and cosmetics buying guidance, RED is the go-to site for young people thanks to its vast volume of user-generated product reviews and style recommendations. According to a report from [Jiemian News](), RED has a conversion rate of more than 21.4 percent (compared to 8.1 percent for TikTok). This makes RED a must-have platform for fashion brand marketers. According to [LeadLeo]()'s analysis, advertising accounts for 80% of RED's profit in 2020, with e-commerce accounting for the remaining 20%. The volume of advertising on RED is roughly three times that of TikTok (Jiemian News, 2021). Posts by celebrities, influencers, and key-opinion customers (KOCs) are the most popular form of advertisement on RED. Skincare, clothes, and cosmetics are the top three categories in these postings, accounting for more than 40% of the total, demonstrating the importance of fashion on RED once again (Jiemian News, 2021).

RED has some features that make it an ideal learning space for learners in the Artstander project. The first would be its openness and encouragement for ordinary individuals to express themselves, which could inspire learners to build their own account and communicate their voice through it. Secondly, it has a wide range of fashion content. On RED, influencers wear a variety of styles, including streetwear, y2k, and even traditional clothes, providing plenty of samples for learners to observe and critique. Finally, the controversies surrounding RED makes it an interesting place to investigate. RED has been criticized for its over-commercialization and deceptive marketing. Such issues and related topics like consumerism, bragging, "catfishing", and the gap between offline and online worlds could all be interesting themes for learners to explore and discuss.

3. Project Description

3.1 Description of overall functionality

3.1.1 Overall description

The Artstander program is a museum curriculum/paid internship for high school students. We plan social media projects that promote dialogue and inclusivity at the Museum and the public, both online and IRL. Each year, the Artstander program would recruit 15 interns. Interns will focus their conversations around anti-racism and intersectionality in fashion as seen on social media, using the Museum as a community establishment and as a site of inquiry.

The curriculum consists of two parts. One would be the in-person meetings that take place at The Museum under the guidance of instructors from the public education department. The other would be an online, asynchronous community work in Discord, a web-based platform. First, they would learn about museum structures and the social role of art, art history, and social media in fashion. Then, learners would form groups based on shared interest on a fashion topic, conduct research to better understand the subject matter. For the end task, they would create and plan their own social media account, and use it to communicate and promote their understanding, interpretation and representation of that specific culture to a wider audience. Lastly, they get the opportunity to take over the social media account of the museum, and run it for a few days. In this process, learners work and play with their smaller group between these sessions. Instructors would have a mentorship relationship with each group to guide them during their exploration.

As active interns at the Museum, Artstanders are each paid a $750 stipend for the school year, receiving $375 at both the midpoint and end of the program. Artstander is open to 11th–12th graders attending New York City high schools. Artstanders meet in person every Saturday from 10:00am to 4:00pm for July 2022.

In this sense, a narrow definition of our Artstanders would be learners who attend the camp in formal, semi-formal, informal, and multiple settings, as categorized by Bano et al. (2018) (p. 48):

- Formal: "institution-based learning environments such as classrooms"
- Semi-formal: "out-of-classroom contexts pre-determined by a teacher, such as...museums and field trips"
- Informal: "recreational or everyday spaces chosen by learners, such as trains, cafes and parks", and;
- Multiple settings: "using their mobile devices in more than one setting, across at least two (physical) learning spaces and contexts"

Along with their process of learning and creation, a broader range of our Artstanders would be the public who see the social media accounts created by our camp participants. This group would mainly learn through viewing and interacting with social media content in informal and multiple settings.

3.1.2 Curriculum (sample lesson plans)

- [Week 1](): Artifact mind mapping
- [Week 2](): Lived Experience & Consumerism
- [Week 3](): Inquiry-based design
- [Week 4](): Iteration and Presentation
- [Week 5](): Museum Take-Over Carousel

3.2 Theoretical Framework

3.2.1 Learning theories

Constructivist theory was raised and studied by educational scholars, including Piaget, Bruner, Vygotsky, etc. as a core approach to synthesizing lived experiences with learning as an ongoing process through which learners build upon prior mental models, thereby shifting knowledge into new constructs. The core principles of Constructivist learning include learning as an active meaning-making process to connect with prior knowledge and experience, learning as a collaborative social activity embedded in real-world settings, and learning as a problem-solving process that requires constructing, reflection and iteration (Wilson, 2018). Our design, while based on constructivist learning theory, is also inspired by the more recent *constructionist* approach as elaborated by Seymour Papert with the core concept of building knowledge and applying it to lived experiences and cultural relevance.

Another theoretical consideration in the Artstander curriculum is connectivist in its social media-rooted design. *Connectivism* reflects a rapidly changing society that is "more complex, connected socially, global, and mediated by increasing advancements in technology" (Duke, Harper, & Johnston, 2013). Similar to the sociocultural view, connectivism as a theory attempts to address organizational knowledge that can reside outside the individual. Learning becomes a process of connecting ideas, evaluating diverse information sources, and deciding what is relevant or important to make knowledge actionable (Siemens, 2005). In the connectivist view, learning may begin with the individual, but knowledge can grow exponentially as individuals collaborate within a network and constantly update information. In this view, an individual's existing state of knowledge is less important than the ability to connect within a network, and it is advancing technology that makes these connections possible.

3.2.2 Instructional design strategies: IBL (PBL, CBI, PjBL), and SDL

Problem-based learning (PBL) refers to the type of learning by solving problems under facilitation. Typically, it would involve extensive collaboration with other learners. During this process, learners are expected to reflect upon the knowledge they obtained, the solution they employed, and the process of negotiating and working collectively to construct their own understanding and solution. It works the best under realistic ill-structured problems (i.e. problems that have multiple possible solutions), because the goal of it is to promote the flexible and effective application of knowledge in different contexts (Dochy et al., 2003; Hmelo-Silver, 2004). Considering the nature of the fashion field (e.g. interdisciplinary, complex) and the nature

of our goal (i.e. to foster higher order thinking skills like deep understanding and flexible application), PBL would be the suitable instructional design strategy for our project.

When employing PBL as the design strategy, there are a few things to be considered. The first thing would be providing scaffolding and support. According to the study by Czabanowska et al. (2012), students in a PBL setting tend to find it difficult in tasks like exploring and integrating because of the heavy workload and the lack of resources and guidances to help them establish interdisciplinary connections across the complicated problem space in the early learning stage. When developing scaffoldings, it is helpful to consider Saye and Brush (2002)'s two types of scaffolding. Soft scaffolds are flexible human assistance offered by instructors or peers when the learners encounter unexpected difficulties in certain contexts, and thus requires instructors to keep an eye on each group's progress and be ready to provide situation-based feedback. In contrast, hard scaffolds refer to the static facilitation that is planned and developed in advance according to the predictable obstacles that students would encounter. Another thing to consider would be how to bring in the learning of factual knowledge. As Boud (1985) stated, the learning process in PBL starts in the very beginning when learners start to explore the problem. Instead of letting instructors plan in advance about the prerequisite knowledge and implement that strictly, the learners should be the ones who decide what knowledge and skills are needed in order to solve their own problems. While this flexibility leaves more agency to learners, it also poses bigger challenges to the designers since every learner has a different level of prior knowledge. Therefore how to know about them and combine them should be carefully considered. Lastly, assessments in PBL are also worth noting. Generally, assessment practices can be divided into three broad categories: (1) enroute, for the purpose of monitoring student progress and assessing the learning process, (2) culminating, for the purpose of observing students' direct responses to the problem under investigation, and (3) individual, for the purpose of determining individual student mastery of targeted content.

Several other learning-related concepts and instructional design strategies also have close connections with PBL. For learning theories, constructivism usually lies behind this approach. First, since the learning is anchored around a problem, in order to trigger the intrinsic motivation among learners, it is necessary that the problem is relevant and realistic (e.g. Involving real stakeholders) to the learners so that they could generate their own meaningful interpretation.

Second, through constant negotiation and collaboration with others, learners would be able to self-assess their own reasoning and engage in co-construction of knowledge. For related strategies, PBL also requires self-directed learning (SDL). Learners should actively use their metacognitive skills to set their own goals, monitor and evaluate the effectiveness of their problem-solving process, and be flexible on their strategies under different situations (Barrows, 1983; Blumberg, 2000; Ertmer & Glazewski, 2015; Hmelo-Silver, Duncan, & Chinn, 2007, as stated in Hmelo-Silver, 2004). Ertmer & Glazewski (2015) propose "the use of frequent checkpoints and record- keeping devices (e.g., group folders, design diaries, goal charts)" as some specific recommendations.

PBL also has a close connection with case-based learning (CBI), for both of them fall under the bigger category of inquiry-based learning (IBL) (Ertmer & Glazewski, 2015). Healy (2005) describes IBL as "mimics, as closely as possible, the actual pattern of inquiry in the discipline being studied" (p. 68). However, they do have some differences. The final student product of PBL is usually an open-ended solution to an ill-structured problem, while for CBI would be written analysis or suggestions to issues in the field.(Ertmer & Glazewski, 2018).

Therefore, the Artstander curriculum takes from anchored learning in the sense that the expected learning outcomes include aspects of PBL, IBL, and PjBL in the participants' end-task projects, which we project will take place on social media platforms as online *interventions*. While the topics of these interventions are open-ended, their problems and solutions are not: the problems students identify, and thus provide solutions and commentary to, are culturally relevant, based on lived experiences, and published to the outside world on social media. Most importantly, there is rich implication for transfer between online and offline commentary that stems from students' Artstander projects, as the intervention transcends the online space and takes place in the wardrobe as well.

### 3.2.3 Considerations for contextual and learner characteristics
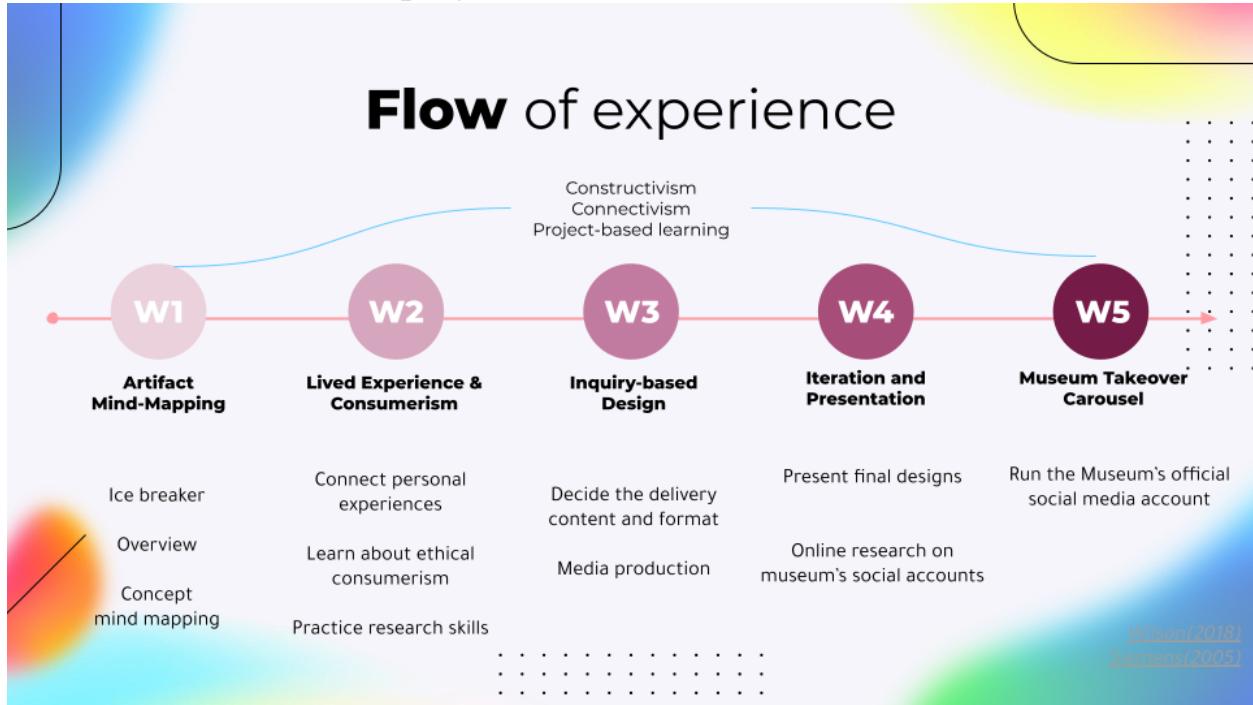
Artstander largely caters to teenagers, who are referred to as Gen Z since they are avid users of social media, where they hunt for fashion inspiration and make purchases (Djafarova & Bowes, 2021).They are digital natives who are immersed in mobile devices with countless sources. Thus, Artstander leverages four social media platforms that teens are fluent with to conduct research, critique and generate fashion contents: Red, TikTok, Instagram, and WeChat.

Moreover, teens utilize fashion to express themselves (Piacentini & Mailer, 2004), and they utilize social media for socialization through self-expressing, seeking advice and validation from their peers and communities (Bailey et al., 2021). Consequently, Artstander defines the learner to play the role of creator, speaking out their views and outwearing their identities. We provide them culturally relevant tasks that inspire them to explore meaningful problems in their community, voice their thoughts, and construct identities based on their lived experiences.Their works will also embrace the potential to affect more teenagers in the long run. For the previously noted socialization need, we characterized the problem-solving experience as group work and provided social activities for students to meet peers with similar interests. We also used Discord to increase their interactions with in-class classmates and created online sessions for them to communicate.

To meet practical expectations for university admission and career hunting among teens, we require them to create a portfolio through curating their findings on the chosen social media platform in the forms of text, photos, or videos. Ideally they will garner social media production skills and use the data to demonstrate their capabilities.
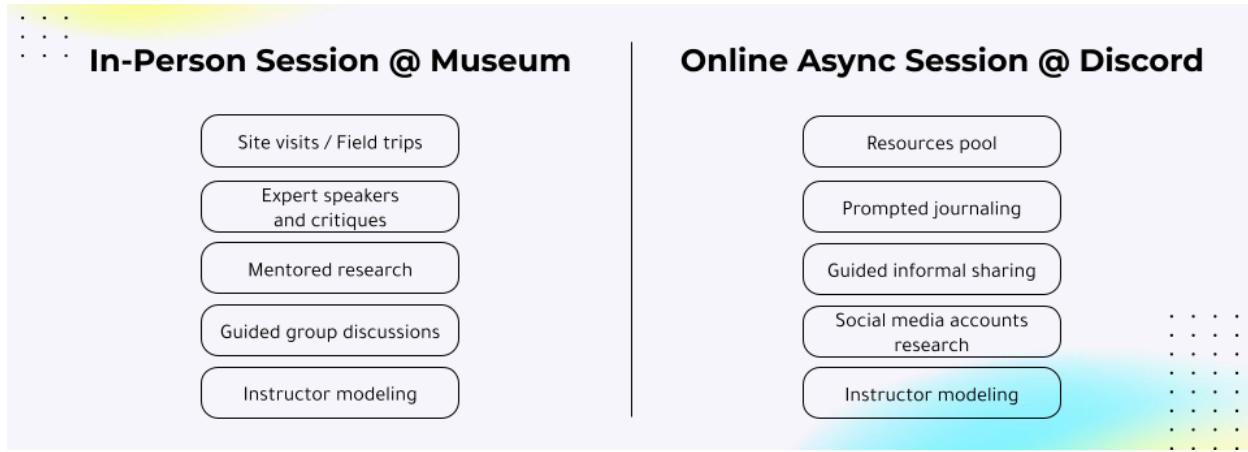
4. Design Documentation

4.1 Flow chart of overall project

4.2 Scaffolding

Students will be asked to ponder over fashion topics on social media that interest them and/or discomfort them, but between these initial interest topics and solidifying Artstanders' roles as researchers, critics and creators, scaffolds are very much needed to aid them in their inquiries and project construction. In connecting their *lived experiences* with their inquiries into how objects play a part in helping or harming others in visual culture, we must take a closer look at our lessons— in both the in-person and online sessions. The figure below lists the different kinds of scaffolding put in place throughout Artstander's 5-week curriculum, but of these we would like to highlight the fact that *instructor modeling* is shared between the offline and online spaces. The curriculum relies heavily on modeling as a method of sharing and challenging between instructor and student, which also means that modeling can therefore present a constraint based on instructor and student positionality.

This scaffolding both online and offline indicates multiple learning experiences and the skills that students will come out with. Students will get to know meaningful fashion accounts addressing controversial and meaningful viewpoints among social media platforms, such as Diet Prada on Instagram; they will garner research capabilities through provided lessons to conduct individual research regarding certain topics, examining the authority of social media contents; they will be asked to reflect on current viewpoints and considerations in fashion through conducting their own research; they will learn how to use social media platforms including Instagram, TikTok, WeChat, and RED to make meaningful posts (text, audio, and video editing). Furthermore, students will analyze and express their own research results and perspectives on social media through generating posts, including writing text, making audio, editing videos, and designing photos, and will discuss and evaluate each other's works through social media interactions including forward, comment and like functionalities.

5. Plan of implementation

5.1 Adoption and Diffusion

Artstander considers adoption and diffusion in regards of stakeholders, their motivations to attend and methods for expanding influence. Arstander would be adopted by three primary parties of stakeholders: the *museum* as the host institution and community space and structure, the *instructors* as modelers, facilitators, and co-learners, and the *participating students* as researchers, critics and creators.

The museum that adopts the Artstander project is interested in having a public education program that could help them develop a closer relationship with adolescent audiences. In return, museums will have viable and marketable outcomes and become more influential on social media platforms.

Learners in the Artstander project are keen on addressing and exploring online attitudes toward fashion and trends through their perceived relevance to cultural artifacts, through

personalized storytelling and research. The Artstander project would therefore engage learners' motivation and desire to keep learning by presenting an opportunity through which they can utilize social media to share their findings.

The instructors and/or facilitators in the Artstander curriculum similarly acknowledge and have the desire to pursue social media as a means of future learning and community e-activism. To them, Artstander is a way to come together as a community, both online and offline, to bridge the gap between the museum as an archive, our learners as activists and consumers, and instructors as co-learners all the while.

Stakeholder	Motivation to adopt	Diffusion: channels of information
Learners	- Stipended internship - Socialization with peers - Possible connections and networking with SMEs - Recommendation letter - Portfolios - Self-expression - Certificate	- Artstander website (Google Site) - Social media - Recommendation from friends and teachers - Schools - Museum website - Newsletter
Museums (Special requirements: museums that have resources and collections about garment or other fashion topics)	- Buzz on social media and website - Certification as a "host" institution/partner - Progressive image re: administrative and budgetary considerations	
SMEs/Guest speakers	- Contribute back to the community - Know and connect with the younger generation - Potential long-standing partnership with curriculum and the museum	

5.2 Application and admission

Link to application survey demo

We will process application and admission for prospective program participants. High school students who are interested in being an ArtStander will complete and submit the application through Artstander google site. Applicants will be assessed based on their familiarity with social media and basic fashion language, technical access, motivation to participate, expectations from the program, and consent to share social media content.

5.3 Technology-integrated curriculum
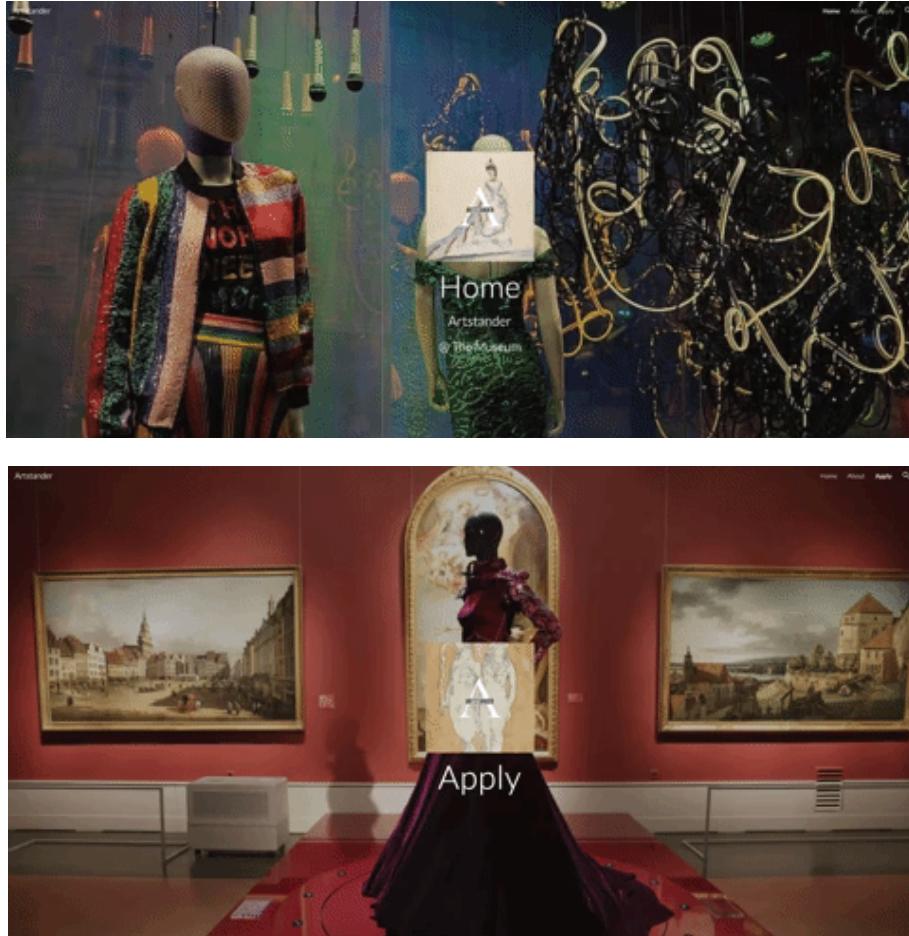
Link to lesson plan demo

      We will work closely with SMEs to develop an effective and accessible weekly curriculum. The curriculum includes a clear overview and achievable objectives, in-person sessions with diverse formats and scaffoldings, online creative activities, and weekly evaluation of students' progress, learning experiences and effectiveness of the implementation.

5.4 Sustainable Artstander Archive

Link to Google Site demo

      We will implement an Artstander google site for promoting Artstander, receiving applications, and archiving and documenting information. Each year, students' resulting portfolios and end-of-program reflections will be showcased on the website for people to read and connect. In this way, we can create a collaborative and sustainable artstander community.

6. Evaluation

6.1 Evaluations for the learning environment

What do we want to assess?		What do we look at to assess it, how do we assess it?
Students'	Attitude toward the learning experience	- Survey questions about positive or negative attitude, anxiety, self-efficacy, confidence… - A Google Form "exit slip" gauging student attitude and comfort with content and analysis
	Motivation toward learning the targeted subject	Do they feel motivated to continue exploring this area?
	Participation, engagement, interaction	Engagement data from both in-person session and Discord space (numbers of posts, comments, likes…)
	Technical fluency	Engagement in Discord
	Content size for each week	Walk out survey after each in-person sessions
Institutional engagement	Instructors' opinions	Flow experience: Such experiences stemmed from three experiential features: "a flash of intensity, a sense of discovery and desire for higher performance" (Bressler and Bodzin 2013, p. 512)
	SMEs's opinions	Casual interviews after guests' visits
	Museum	Formal interviews with museum administrations

(Gao & Sun, 2020)

6.2 Evaluations of the learners

What do we want to assess?		What do we look at to assess it, how do we assess it?
Knowledge	Prior and accumulated knowledge about topics like sustainability, environmentalism, labor practices	- Mind map - Final product: "Portfolio" approach to cumulative learning experience (EID Ch. 9)
Attitude & Actionable change	"It matters"	Engagements in discord - Instructor assessment of written components on Discord (channels content and journals) - Numbers of posts, likes, comments
Skills	Social media literacy Technical usage	- Engagement rate/numbers of their accounts - Engagement data on Discord
	Self-regulated learning	Self-journaling and revisitation

	Content production	- Peer review - SMEs's evaluation
	Expression and negotiation	Responses and reactions to conflicts and negative comments
	Collaborative skills	360 degree evaluation after teamwork

(Gao & Sun, 2020)

6.3 Sample evaluation plan: Week 2

What to be evaluated	Specific questions	Methods and Implementation
Learning goals evaluation	**Lived experience.** Successfully Connect their prior personal experiences to approach cultural and ethical aspects of fashion.	**Mind map** and **in-class presentation**.
	Basic understanding about **cultural appropriation and ethical consumerism.**	**Verbal answers** to question prompts and **written/drawing responses** to relevant videos and articles. In the in-class session, students will be asked some questions, and In the online session, students will be asked to write responses to a relevant video or article posted by the instructor. Their change in knowledge will be assessed through their verbal and written responses.
	Use proper **research methods** to search for relevant resources.	**Class participation** in the QA with instructor session and **research post** in online session.
Learning experience evaluation	Students' experience in **discussion and collaboration** sessions. How do they feel about working with others? Is the facilitation successful?	After-class **survey** and **behavior observation**.
	Students' experience in **guest speaker** sessions. How do they feel about the presentation?	
	Students' experience in **instructor presentation** sessions. How do they feel about the presentation?	
	Students' experience in **self-study** sessions. Is it efficient? Are they provided with sufficient resources?	
	Students' experience in **online** sessions. What	

	do students think about the online activities? Are they efficient?	
Context evaluation	Are the chosen **technologies** effective and accessible?	After-class **survey** and **behavior observation**. Ask questions about their comfortableness using the technologies and interacting with the physical space and observe their behaviors while using the technologies.
	In the **physical space** designed properly for delivering the materials?	
	Are the **instructions** clear and well-presented?	
	Is the **timing** and section **scheduling** appropriate for the workshop?	
Stakeholder evaluation	Are the **museum administrators** satisfied? What to improve?	**Survey** and **short interviews**. Ask about their opinions about the implementation.
	Are the **collaborators/program investors** satisfied? Is it too costly? What to improve?	

References

Allaire, C. (2020, December 28). How TikTok Changed Fashion This Year. Vogue.
https://www.vogue.com/article/how-tiktok-changed-fashion-this-year.

Bailey, A. A., Bonifield, C. M., & Elhai, J. D. (2021). Modeling consumer engagement on social
networking sites: Roles of Attitudinal and motivational factors. *Journal of Retailing and
Consumer Services*, 59, 102348. https://doi.org/10.1016/j.jretconser.2020.102348

Bano, M., Zowghi, D., Kearney, M., Schuck, S., & Aubusson, P. (2018). Mobile learning for science and
mathematics school education: A systematic review of empirical evidence. *Computers in
Education* 121, pp. 30-58. https://doi.org/10.1016/j.compedu.2018.02.006

Berndt, T. J. (1992). Friendship and Friends' Influence in Adolescence. Current Directions in
Psychological Science, 1(5), 156–159. http://www.jstor.org/stable/20182164

Boud, D., Keogh, R., & Walker, D. (1985). Promoting Reflection in Learning: A Model. *Reflection:
Turning Reflection into Learning*. London: Routledge.

Brown, B.B. (2004). Adolescents' Relationships with Peers. In *Handbook of Adolescent Psychology* (eds.
R.M. Lerner and L. Steinberg). https://doi.org/10.1002/9780471726746.ch12

Burns, K. (2009). Celeb 2.0: How Social Media Foster Our Fascination with Popular Culture.Retrieved
from http://publisher.abc-clio.com/9780313356896

Calder, B. J., & Malthouse, E. C. (2008). Media engagement and advertising effectiveness. *Kellogg on
advertising and media*, 1, 36.

Chaka, C. (2009). From classical mobile learning to mobile web 2.0 learning. In Guy R. (Ed.), *The
Evolution of Mobile Learning and Teaching* (pp. 79-102). Informing Science Press.

Chavan, R. B. (2018). Analysis of Fashion Industry Business Environment. *Latest Trends in Textile and
Fashion Designing*, 2(4). https://doi.org/10.32474/lttfd.2018.02.000144

Chen-Yu, J., Hong, K., & Seock, Y. (2010). Adolescents' clothing motives and store selection criteria: A
comparison between South Korea and the United States. *Journal of Fashion Marketing and
Management*, 14(1), 127-144. https://doi.org/10.1108/13612021011025465

Chineseamerican. (2020). *A letter from a Yale student to the Chinese American community*. Retrieved
December 23, 2021, from https://chineseamerican.org/p/31571

Choi, A. (2020). Social comparison in fashion blogging: "creative self" as the new genre in fashion
communication. Journal of Fashion Marketing and Management: *An International Journal*, 24(4),
651-665. https://doi.org/10.1108/JFMM-07-2019-0140

Collins, A., & Halverson, R. (2018). Rethinking education in the age of technology: The digital revolution
and schooling in America. Teachers College Press.

Collins, A., Neville, P., & Bielaczyc, K. (2000). The role of different media in designing learning
environments. *International Journal of Artificial Intelligence in Education*, 11, 144-162.

Common Sense Media. (2019, October 28). The Common Sense Census: Media Use by Tweens and
        Teens, 2019.
        https://www.commonsensemedia.org/research/the-common-sense-census-media-use-by-Tweens-a
        nd-teens-2019

Common Sense Media. (2019, October 28). The Common Sense Census: Media Use by Tweens and
        Teens, 2019.
        https://www.commonsensemedia.org/research/the-common-sense-census-media-use-by-Tweens-a
        nd-teens-2019

Corbett, E. (2021, May 25). The aesthetics of activism: How Instagram changed protesting. Refinery 29.
        https://www.refinery29.com/en-us/2021/05/10335757/instagram-activism-aesthetics-imact

Czabanowska, K., Moust, J. H., Meijer, A. W., Schröder-Bäck, P., & Roebertsen, H. (2012).
        Problem-based Learning Revisited, introduction of Active and Self-directed Learning to reduce
        fatigue among students. *Journal of University Teaching & Learning Practice*, 9(1).
        https://doi.org/10.14453/jutlp.v9i1.6

Dennen, V. P., & Rutledge, S.A. (2018). The embedded lesson approach to social media research:
        Researching online phenomena in an authentic offline setting. *TechTrends* 62, 483–491.
        https://doi.org/10.1007/s11528-018-0315-4

Dixon, B. (2009). Reflective Video Journals and Adolescent Metacognition: An exploratory study. In I.
        Gibson, R. Weber, K. McFerrin, R. Carlsen & D. Willis (Eds.), *Proceedings of SITE
        2009--Society for Information Technology & Teacher Education International Conference* (pp.
        2516-2522). Charleston, SC, USA: Association for the Advancement of Computing in Education
        (AACE). Retrieved November 24, 2021 from
        https://www.learntechlib.org/p/31011.

Djafarova, E., & Bowes, T. (2021). 'Instagram made Me buy it': Generation Z impulse purchases in the
        fashion industry. *Journal of Retailing and Consumer Services*, 59, 102345.
        https://doi.org/10.1016/j.jretconser.2020.10234

Dochy, F., Segers, M. R., Van den Bossche, P., & Gijbels, D. (2003). Effects of problem-based learning: A
        meta-analysis. *Learning & Instruction*, 13(5), pp. 533-568.
        https://doi.org/10.1016/S0959-4752(02)00025-7

Domagk, S., Schwartz, R. N., & Plass, J. L. (2010). Interactivity in multimedia learning: An integrated
        model. *Computers in Human Behavior*, 26, 1024-1033. https://doi.org/10.1016/j.chb.2010.03.003

Duke, B., Harper, G., & Johnston, M. (2013). Connectivism as a digital age learning theory. *The
        International HETL Review*. Special Issue 2013, pp. 4-13.

Edwards, E., Gosden, C., & Phillips, R. B. (2006). *Sensible objects: Colonialism, museums, and material
        culture*. Oxford: Berg.

Ertmer, P. A., & Glazewski, K. D. (2015). *Essentials for PBL implementation: Essential Readings in
        Problem-Based Learning*, 89–106. https://doi.org/10.2307/j.ctt6wq6fh.12

Elkind, D. (1967). Egocentrism in Adolescence. *Child Development*, 38(4), 1025–1034. https://doi.org/10.2307/1127100

Gagne, R. (1985). *The Conditions of Learning* (4th Ed.). New York: Holt, Rinehart & Winston.

Gao, F., Li, L. & Sun, Y. (2020). A systematic review of mobile game-based learning in STEM education. *Education Tech Research Dev*, 68(7), 1791–1827. https://doi.org/10.1007/s11423-020-09787-0

Gentina, E., Shrum, L. J., & Lowrey, T. M. (2016). Teen attitudes toward luxury fashion brands from a social identity perspective: A cross-cultural study of French and U.S. teenagers. *Journal of Business Research*, 69(12), 5785-5792. https://doi.org/10.1016/j.jbusres.2016.04.175

Gould, A. S. (2014). Invisible visualities: Augmented reality art and the contemporary media ecology. Convergence, 20(1), 25–32. https://doi.org/10.1177/1354856513514332

Gündüz, Ü. (2017). The effect of social media on identity construction. *Mediterranean Journal of Social Sciences*, 8(5), 85-92. DOI:10.1515/mjss-2017-0026

Healey, M. (2005). Linking research and teaching exploring disciplinary spaces and the role of inquiry-based learning. *Reshaping the university: new relationships between research, scholarship and teaching*, 67-78.

Heinrich, R., Molenda, M., Russell, J.D., Smaldino, S.E. (1996). *Instructional Media and Technologies for Learning*. Englewood Cliffs, NJ: Merrill.

Hmelo-Silver, C. E. (2000). Knowledge recycling: Crisscrossing the landscape of educational psychology in a problem-based learning course for preservice teachers. J. *Excell*. Coll. Teach. 11, 41–56.

Hmelo-Silver, C.E. (2004). Problem-based learning: What and how do students learn?. *Educational Psychology Review* 16, pp. 235–266. https://doi.org/10.1023/B:EDPR.0000034022.16470.f3

Hoffman, E. S. (2009). Social media and learning environments: Shifting perspectives on the locus of control. *In Education*, 15(2). https://doi.org/10.37119/ojs2009.v15i2.54

Hogan, M. J., Dwyer, C. P., Harney, O. M., Noone, C. & Conway, R. J. (2015). Metacognitive Skill Development and Applied Systems Science: A Framework of Metacognitive Skills, Self-regulatory Functions and Real-World Applications. In A. Peña-Ayala (Ed.), *Metacognition: Fundaments, Applications, and Trends* (pp. 75-106). Springer. DOI: 10.1007/978-3-319-11062-2

Huntley, D. (2020). Young people and social media. Literacy Learning: The Middle Years, 28(1), 16–18. https://search.informit.org/doi/10.3316/informit.941063917746316

Iqbal, M. (2021, November 12). TikTok Revenue and Usage Statistics (2021). Business of Apps. https://www.businessofapps.com/data/tik-tok-statistics/

Jiemian News. (2021). 数据｜小红书的"种草软文"正在收割年轻的小资女性. Retrieved December 23, 2021, from https://www.jiemian.com/article/6169556.html

Kastenholz, C. (2021, May 17). Gen Z and the rise of social commerce. Forbes.
        https://www.forbes.com/sites/forbesagencycouncil/2021/05/17/gen-z-and-the-rise-of-socal-comm
        erce/?sh=b50dd35251d0

Katz, E., Haas, H., & Gurevitch, M. (1973). On the Use of the Mass Media for Important Things.
        American Sociological Review, 38(2), 164–181. https://doi.org/10.2307/2094393

Kemph, J.P. (1969), Erik H. Erikson. Identity, youth and crisis. New York: W. W. Norton Company, 1968.
        Syst. Res., 14: 154-159. https://doi.org/10.1002/bs.3830140209

Khlaif, Z.N., Salha, S. & Kouraichi, B. (2021). Emergency remote learning during COVID-19 crisis:
        Students' engagement. *Educ Inf Technol* 26, 7033–7055.
        https://doi.org/10.1007/s10639-021-10566-4

Kitchener, K. S., & King, P. M. (1981). Reflective judgment: Concepts of justification and their
        relationship to age and education. *Journal of Applied Developmental Psychology*, 2(2), 89–116.
        https://doi.org/10.1016/0193-3973(81)90032-0

Kitchener, K. S. (1983). Cognition, metacognition, and epistemic cognition: A three-level model of
        cognitive processing. *Human Development*, 26(4), 222–232. https://doi.org/10.1159/000272885

Krathwohl, D. R. (2002). A revision of Bloom's taxonomy: An overview. *Theory into Practice*, 41(4),
        212-218. https://doi.org/10.1207/s15430421tip4104_2

Kuhn, D. (1983). On the dual executive and its significance in the development of developmental
        psychology. In *On the development of developmental psychology* (Vol. 8, pp. 81-110). Karger
        Publishers.

Lee, A. (2020). TikTok Holds Its Own Fashion Month: Women's Wear Daily. Wwd, 6.
        http://ezproxy.cul.columbia.edu/login?url=https://www.proquest.com/trade-journals/tiktk-holds-o
        wn-fashion-month/docview/2497942023/se-2?accountid=10226

Liao, R. (2019, June 24). *Cartier, Bulgari and other luxury brands are flocking to WeChat. TechCrunch*.
        Retrieved December 23, 2021, from
        https://techcrunch.com/2019/06/23/luxury-brands-sell-on-wechat/

Livingstone, S. (2008). Taking risky opportunities in youthful content creation: teenagers' use of social
        networking sites for intimacy, privacy and self-expression. *New Media & Society*, 10(3),
        393–411. https://doi.org/10.1177/1461444808089415

Ma, Y., Yang, X., Liao, L., Cao, Y., & Chua, T. (2019). Who, Where, and What to Wear? Extracting
        Fashion Knowledge from Social Media. *In Proceedings of the 27th ACM International
        Conference on Multimedia* (MM '19). *Association for Computing Machinery,* New York, NY,
        USA, 257–265. https://doi.org/10.1145/3343031.3350889

Madden, M., & Zikuhr, K. (2011, August 26). 65% of online adults use social networking sites. Pew
        Research Center.
        https://www.pewresearch.org/internet/2011/08/26/65-of-online-adults-use-social-networing-sites/

Marcia, J. E. (1993). The Ego Identity Status Approach to Ego Identity. *Ego Identity*, 3–21.

McLoughlin, C. & Lee, M. (2008). The three P's of pedagogy for the networked society: Personalization, participation, and productivity. *International Journal of Teaching and Learning in Higher Education*, 20(1), 10-27. Retrieved December 15, 2021 from https://www.learntechlib.org/p/55046/.

Muuss, R. E. (1976). Kohlberg's cognitive-developmental approach to adolescent morality. *Adolescence*, 11(41), 39.

Ng, W., Ware, M. S., & Greenberg, A. (2017). Activating diversity and inclusion: A blueprint for museum educators as allies and change makers. *Journal of Museum Education*, 42(2), 142-154. https://doi.org/10.1080/10598650.2017.1306664

Nguyen, T. (2020, August 12.) How social justice slideshows took over Instagram. Vox. https://www.vox.com/the-goods/21359098/social-justice-slideshows-instagram-activism

Nguyen, T. (2021, July 19). Gen Z doesn't know a world without fast fashion. Vox. https://www.vox.com/the-goods/2021/7/19/22535050/gen-z-relationship-fast-fashion

Orehek, E., & Human, L. (2017). Self-expression on social media: Do tweets present accurate and positive portraits of impulsivity, self-esteem, and attachment style? *Personality and Psychology Bulletin*, 43(1), 60-70. https://doi.org/10.1177/0146167216675332

Palmer, D. (2020). Mobile Photography and Artistic Activism in the "Instagram Museum". In L. Hjorth, A. de Souza e Silva, & K. Lanson (Eds.), *The Routledge Companion to Mobile Media Art* (1st ed.). Routledge. https://doi.org/10.4324/9780429242816

Perry, William G., Jr. (1970), *Forms of Intellectual and Ethical Development in the College Years: A Scheme* (New York: Holt, Rinehart, and Winston); reprinted November 1998; Jossey-Bass; ISBN: 0787941182.

Piacentini, M. and Mailer, G. (2004), Symbolic consumption in teenagers' clothing choices. *Journal of Consumer Behaviour*, 3: 251-262. https://doi.org/10.1002/cb.138

Purcell, K., Rainie, L., Heaps, A., Buchanan, J., Friedrich, L., Jacklin, A., Chen, C., & Zickuhr, K. (2013). How Teens Do Research in the Digital World. The Education Digest 78(6), 11-17. http://ezproxy.cul.columbia.edu/login?url=https://www.proquest.com/magazines/how-teens-do-research-digital-world/docview/1283329082/se-2?accountid=10226

Reach of leading social media and networking sites used by teenagers and young adults in the United States as of 3rd quarter 2019. In Statista - The Statistics Portal. Retrieved November 20, 2021 from https://www.statista.com/statistics/199242/social-media-and-networking-sites-used-by-u-teenagers/

Reuters. (2019, October 17). Christian *Dior criticized over China map, apologizes, upholds 'one China'*. Reuters. Retrieved December 23, 2021, from https://www.reuters.com/article/us-china-dior-politics/christian-dior-criticized-over-china-map-apologizes-upholds-one-china-idUSKBN1WW096

Rodriguez, N (2014). Identité, représentations de soi et socialisation horizontale chez les adolescentes âgées de 11 à 15 ans pratiquant l'expression de soi sur Internet. Psychologie. Université Toulouse le Mirail - Toulouse II, 2014. Français. NNT : 2014TOU20043ff. Tel-01220412f

Rosen, L.D., Whaling K., Carrier, L. M., Cheever, N.A., & Rokkum, J. (2013). The media and technology usage and attitudes Scale: An empirical investigation. *Computers in Human Behavior*, 29(6), 2501-251. https://doi.org/10.1016/j.chb.2013.06.006

Ruggiero, T. E. (2000) Uses and gratifications theory in the 21st century. *Mass Communication and Society*, 3(1), 3-37. https://doi.org/10.1207/S15327825MCS0301_02

Salehudin, M., Hamid, A., Zakaria, Z., Rorimpandey, W., & Yunus, M. (2020). Instagram user experience in learning graphic design. *International Journal of Interactive Mobile Technologies*, 14(11), 183. http://dx.doi.org/10.3991/ijim.v14i11.13453

Saye, J.W., & Brush, T. (2002). Scaffolding critical reasoning about history and social issues in multimedia-supported learning environments. *ETR&D* 50, pp. 77–96. https://doi.org/10.1007/BF02505026

Siemens, G. (2005). Connectivism: A learning theory for the digital age. *International Journal of Instructional Technology & Distance Learning*, 2, 3-10.

Social media metrics for global fashion brands in 2019. In Statista - The Statistics Portal. Retrieved November 19, 2021 from https://www.statista.com/statistics/442817/fashion-brand-social-media-metrics/.

Social media metrics for global fashion brands in 2019. In Statista - The Statistics Portal. Retrieved November 20, 2021 from https://www.statista.com/statistics/442817/fashion-brand-social-media-metrics/

Stanley, P. (2019). Unlikely hikers? Activism, Instagram, and the queer mobilities of fat hikers, women hiking alone, and hikers of colour. *Mobilities* 15(2), 1-16. https://doi.org/10.1080/17450101.2019.1696038

Suh, S. (2020). Fashion Everydayness as a Cultural Revolution in Social Media Platforms—Focus on Fashion Instagrammers. *Sustainability*, 12(5), 1979. MDPI AG. http://dx.doi.org/10.3390/su12051979

Sun, W. (2021, January 21). *WeChat's potential for social activism and civic action in the Chinese diaspora*. Georgetown Journal of International Affairs. Retrieved December 23, 2021, from https://gjia.georgetown.edu/2020/12/10/wechats-potential-for-social-activism-and-civic-action-in-the-chinese-diaspora/

Sweeny, Robert. (2009). There's no 'I' in YouTube: social media, networked identity and art education. *International Journal of Education Through Art*, 5, 201-212. https://doi.org/10.1386/eta.5.2and3.201/1

Thanapornsangsuth, S., & Holbert, N. (2020). Culturally relevant constructionist design: exploring the role of community in identity development. *Information and Learning Sciences* 121(11-12), pp. 847-867. https://doi.org/10.1108/ILS-02-2020-0024

Thota, N. (2015). Connectivism and the use of technology/media in collaborative teaching and learning. New Directions for Teaching & Learning, 142, 81-96. https://doi.org/10.1002/tl.20131

Viţelar, A. (2019). Like Me: Generation Z and the Use of Social Media for Personal Branding. *Management Dynamics in the Knowledge Economy*, 7(2), 257-268. http://dx.doi.org/10.25019/MDKE/7.2.07

Vraga, E., Bode, L., & Troller-Renfree, S. (2016). Beyond self-reports: Using eye tracking to measure topic and style differences in attention to social media. *Content, Communication Methods and Measures*, 10(2-3), 149-164. https://doi.org/10.1080/19312458.2016.1150443

Weilenmann, A., Hillman, T., & Jungselius, B. (2013). Instagram at the museum: Communicating the museum experience through social photo sharing. *Conference on Human Factors in Computing Systems - Proceedings*. https://doi.org/10.1145/2470654.2466243

Wilson, B. G. (2018). Constructivism for Active, Authentic Learning. In *Trends and issues in Instructional Design and Technology* (pp. 61–67). essay, Pearson.

Wu, W., & Achim, A.-L. (2019, December 23). *China's most controversial luxury incidents in 2019*. Jing Daily. Retrieved December 23, 2021, from https://jingdaily.com/chinas-most-controversial-luxury-incidents-in-china/

Appendix

Interviews

Interviewee1	Cathy, female, 21, Chinese, has 266K followers on Weibo, college student
1. How do you usually come into contact with fashion trends (e.g. outfits, makeup...)	"For now I would say, Weibo, Bilibili, Youtube, RED… Mainly social media. I am a heavy user of these platforms in its fashion division. I follow many influencers, and if I like their style, I would always actively keep track of them. But I also like to explore the new or heated content that the platforms push to me on my homepage, and I'm constantly looking for more influencers that I like." "I used to follow many influencers on Wechat, but that's a while ago, since video contents are more popular now than merely texts and images. Two of my favourite bloggers would be annystleontop and gogoboi: they are the kind of fashion bloggers who have a close relationship to celebrities and entertainment information. I also followed Vogue, Bazaar, Nylon and stuff when I was in highschool." "There was a time when I was highly influenced by celebrity trends. I would just type in 'IU' and 'GD', you know, the Kpop idols, to see what they wear, and get the same clothing online. These searching words were extremely popular on Taobao and other online shopping platforms."
2. What kind of post would make you want to try on that style? What process would you go through between seeing a post and deciding to try it?	"It's not like an instant impulse that immediately drives me to try or buy it. It's more like forming an impression at the back of my head. If I think it suits me or would probably look good on me, next time when I'm actually shopping and see something similar, I would just remember it and try it on." "I would be more attracted to practical techniques such as how to tie a flower on a sweater, or how to show the cuffs..." "Now I kind of have my own style. Also the styles that interest me are kind of similar now."
3. When buying clothes or beauty products, what would be your major considerations?	"The most important thing to me would be if it fits me or would look good on me. One part of it would be if it suits my body. For example, I have thick thighs, so I would try those outfits that work for a 'pear-shaped body'. Another part would be if it could show my personality. I feel that outfits and makeup could really influence how people think of you, especially for a first impression, so I want it to be consistent with my personality." "Also, sometimes I would suddenly be really attracted to some style that I never had before, or are the exact opposite of my usual style. Like I always go for a more gentle kind of vibe, but there was a time when I really wanted to try a slicked back hairstyle. So I went for it at my graduation ceremony

	and it was really fun." "And I think it is also related to the experience/context/stage that I'm currently going through. Like when I was doing an internship, I would go for a cooler or more mature style. I bought some red lipstick for that haha."
4. Do you consider cultural/historical/ethical/moral issues when making decisions about fashion?	"I kind of have mixed feelings. For example, I really hate how bm has the 'one-size' body-shaming mindset. But then when I actually stepped into their store, I was attracted by its cute clothing and discounted price, so I still ended up buying some. It felt really awkward because I'm wearing it but I also feel disgusted with it. However, later I heard about how they are like racist to black people, then I got so mad that I eventually stopped buying it." "I'm an influencer myself, so it is an even more sensitive topic for me. A friend of mine recently posted about Nike, and she received so many hate comments because of the Xinjiang Cotton issue. I'm also super careful about the brand that I'm posting now."
5. Compared with your highschool years, would there be a major change in your attitude and thinking about fashion?	"I don't think there's any big differences in my attitude, but I do think the way I think about fashion has become more specific and concrete. I have clearer preferences about what I like and don't like. When I was in highschool, I didn't have so much time to search for this info. Also I had to wear school uniforms every weekday. But when I went to college, I got more information about fashion, and I also got to dress up everyday as I wish. I feel that I have more practical experiences about that haha."

Interviewee 2	"Olive", age 17, current high school student in NYC. 580 followers on Instagram; 12 on TikTok because lurker
	● Instagram and Tiktok
	   ○ Instagram aesthetic, "pleasing thing to look at me for me"
	      ■ Memes, fashion trends
	      ■ "What I would wear if I lived in New York"
	   ○ "Kind of the same" on TikTok
	      ■ Videos of people making clothing
	      ■ How to style

1. How do you usually come into contact with fashion trends (e.g. outfits, makeup...)	● "Nobody talks about the history of the looks and how they come about"
	● "I have a level of awareness for it, and I look for it now"
	● "A lot of discourse on what cultural appropriation is" on TikTok, "can stitch videos on TikTok", and "it's great that there is this discourse online, but it's concerning that there are no sources cited"
	● Academically/literature support in posts; danger of "taking all of it seriously"
	   ○ Credibility with sources
	   ○ Discourse in inquiry, questioning
	   ○ Issue of performative activism

	■ Cancel culture
	■ "My sister is 13 and she's just beginning to become aware of how fucked up the American…. Thing is"
	  ○ Children on these apps
	  ○ Cultural appropriation vs. cultural appreciation, fine line
	● Gender expression: "I think it's really interesting, how social media and fashion is becoming nonbinary-- like Harry Styles or Jayden Smith. The concept of feminine and masculine clothing has been dissolving more recently than before, depending on the media you consume. Gender expression really plays a big part."
	● Sexualization of women/non-men: "Attitudes toward Olivia Rodrigo, for example, generally sexualizes her as a person-- censorship and human body"

2. What kind of post would make you want to try on that style? What process would you go through between seeing a post and deciding to try it?	● "Liking what I see, simple as that, and then I look at brands and what they kind of, like, stand for." ● "Generally my Instagram and TikTok feeds are already full of content or content creators I already like and follow, so it's also, I guess, related to who I follow and if I see some kind of parallel between their body shape and mine, or their taste and mine, or whatever."

3. When buying clothes or beauty products, what would be your major considerations?	● Shein and Fashion Nova
	  ○ Cancelling companies, or cancelling the content creators?
	  ○ Cancelling the company more effective for change… meanwhile, cancelling a human is more about social validation
	○ "Cancel culture limits the line of communication and learning opportunities"
	● "I thrift. Like, I go to Goodwill, secondhand stores. DePop is a great invention, because you can find so many secondhand clothes there. And more brands that are clear on where they come from"
	  ○ "But there's a line I don't cross-- like, Goodwill is not geared toward teenage girls of higher socioeconomic status to shop for, but for lower-income families"
	  ○ "I have the privilege and luxury to not shop fast fashion"
	  ○ "Thrifting is not being glorified by social media, which, I guess, is a good thing, but… also, it's a thing of, like, taking away clothing from people who need it probably more than us"
	● "I don't care about luxury brands at all… I don't like their styles. If my eyes are not happy, then I'm not gonna buy it."
	  ○ "Most people my age don't feel the need to show off they have money, because they are comfortable with the fact that they do"
	  ○ "There was a Yeezy phase.. During the initial drop, and everyone was like, OMG I can't believe they actually got Yeezys."
	  ○ "Big name brands don't have any value to me when they're

	contemporary… the vintage stuff is cooler, because they're historical."
4. Do you consider cultural/historical/ethical /moral issues when making decisions about fashion?	
5. Compared with your highschool years, would there be a major change in your attitude and thinking about fashion?	"I thought Yeezys were ugly, for one thing." - Interest surrounding unbranded clothing: "It's incredible how many girls have Canada Goose jackets. They even get their mixed up with each other, it's that common. "I don't think middle schoolers think about fashion so much, but that might have changed between when I was in middle school" - Change in Instagram as a platform: "There wasn't even the Explore function on Instagram when I got it in fifth grade. But it's the function that really made me interested in fashion. Like, the whole concepts of "glow-ups". That's what got me really thinking about trends." "Even just, like, taking high-waisted versus low-waisted pants. So much of women's fashion is catered toward the male gaze. Women's body types go in and out of style, and a lot of these dynamics support skinny white girls." "It's also that we're now considering inclusivity, and slowly becoming more body-positive." - Generational warfare: "it's a thing about survival, for sure. Like, fuck it, I can do whatever I want, but also, let's save the planet. Glorifying small moments, specific cute little things, the vibe, like cottagecore, is what drive a lot of fashion content on social media." - Regional and locality in fashion choices: "I can tell, on the Brooklyn Bridge, who is from Brooklyn and who is from Manhattan… It's interesting that you can group them together and it's pretty accurate." "Depends on your lived experience, as someone who grew up in New York."

Interviewee 3	"Cindy", age 15, current high school student in an international school at Shanghai.
1. How do you usually come into contact with fashion trends (e.g. outfits, makeup...)	"My mother shopped for clothes online and I chose from the ones she bought. I don't really care about fashion or make-up, but my classmates wear makeup everyday." "They will not influence me. I am not interested so I don't care. Some of my friends start caring about fashions because others do, but I am more interested in other things." "Some of my friends follow influencers on RED and TikTok, so they looked at what they recommended."

2. What kind of post would make you want to try on that style? What process would you go through between seeing a post and deciding to try it?	"Some of my friends follow bloggers that have similar body shapes, so they could estimate how the clothes will be like on their bodies. I think people are more attracted to videos rather than texts or photos, because it's harder to distort videos so people look more authentic"
3. When buying clothes or beauty products, what would be your major considerations?	"I care about whether the clothes fit me and whether it is comfortable"
4. Do you consider cultural/historical/ethical/moral issues when making decisions about fashion?	"I don't have much feeling about it. Actually, many of my friends wear JK even though they know nothing about Japan, but I think wearing ethical clothings doesn't necessarily mean you are a supporter of their cultures or something. I think if you feel the clothes looks good on you, you can wear it" "If I saw some westerners wear Qipao in Helloween, I would possible perceive this action as spreading Chinese culture"

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Interviewee 4	"Chris", male, high school student in the UK
1. How do you usually come into contact with fashion trends (e.g. outfits, makeup...)? What/who are affecting your attitudes and understanding towards fashion?	"I usually come into contact with fashion trends when looking at social media and whenever tiktok appears in my feed." "Also at school, a lot of classmates wear different styles and it widens my knowledge of fashion a lot by showing me that there are endless possibilities of what you could wear."
2. What kind of post would make you want to try on that style? What process would you go through between seeing a post and deciding to try it?	"I follow a few fashion accounts but based on my type of style only. However, sometimes the accounts show different styles I've never seen before, if I like the style, I would search the comments to see if someone asked about it. But after that I would look at more of the same style and I would browse some of the clothes on an online shop."
3. When buying clothes or beauty products, what would be your major considerations?	"My major considerations are the materials used in the clothes, the quality of the clothes themselves and how convenient the clothes are, like for example how many pockets are there, weather resistance, etc."
4. Do you consider cultural/historical/ethical/moral issues when	" Usually I don't really think about the many issues when making decisions about fashion, unless the clothes make a direct link towards an issue, like a t-shirt design etc."
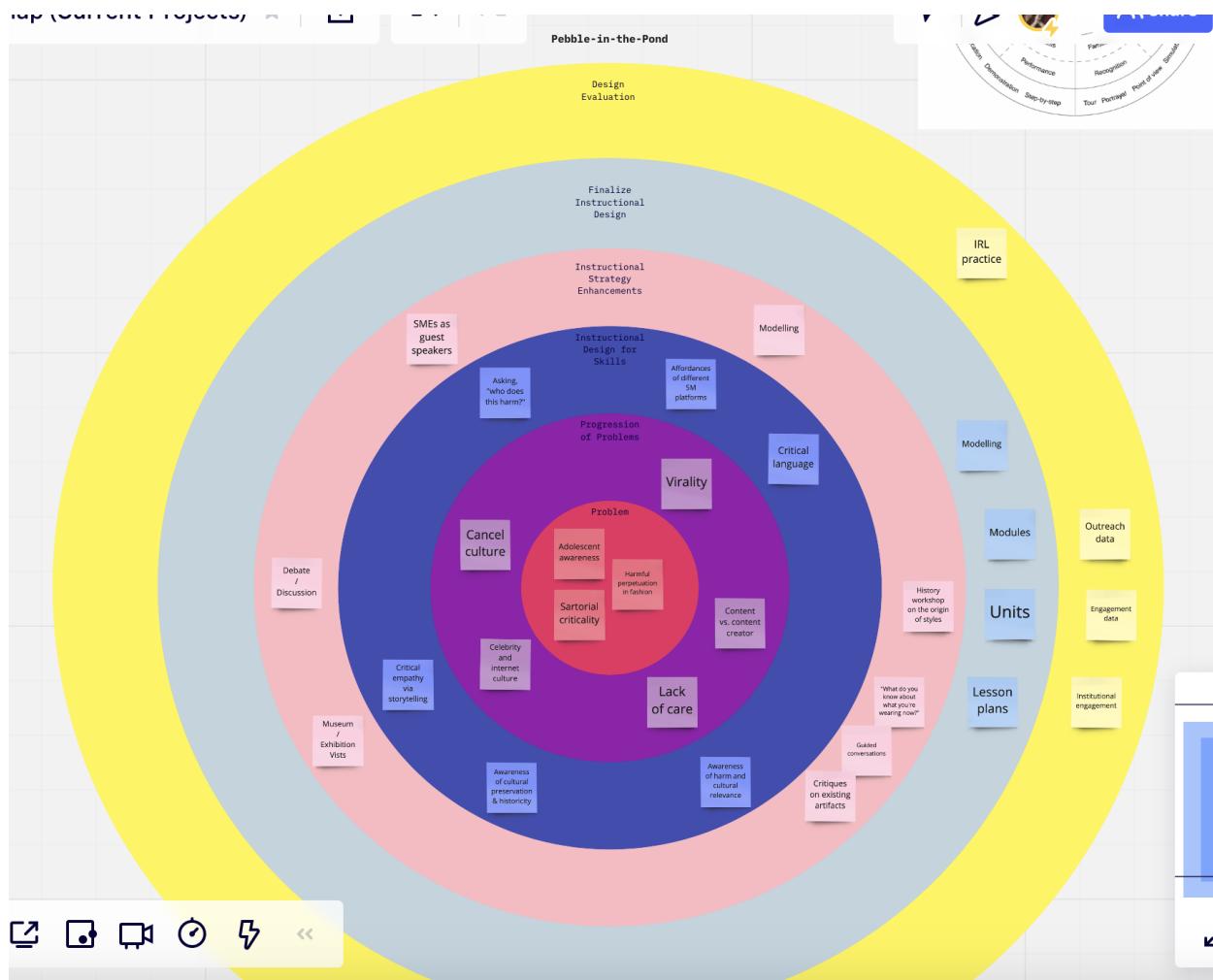
making decisions about fashion?	
5. Do you have one or several favorite fashion styles? What are they? Why do you feel attracted to them?	"I mainly like techwear, but I also like oversized streetwear and I'd like to explore warcore in the future. I'm attracted to them because I really like technical clothing and the color back. I Like to have many pockets, adjustable straps and overall, I like the way it looks and I like convenient clothing."
6. Have you ever seen something about fashion that bothers you, makes you feel uncomfortable or even annoys you? Why do you feel that way?	"Honestly, nothing about fashion bothers me. I'd like everyone to be able to express themselves in their own way."
7. Are you interested in knowing more about fashion? If yes, what aspects do you want to explore? If not, why is that?	"Not really. Personally for me I'm not too interested in fashion but I love seeing what people come up with when pairing clothes together. It's very creative."
8. If there is a free fashion summer camp hosted by a museum, would you consider participating in it? What would you expect from that experience?	

Interviewee5	"J", male, Sophomore, Central Christian School, Ohio State, 17 years old
1. How do you usually come into contact with fashion trends (e.g. outfits, makeup...)	"I usually learn fashion things through TikTok and Instagram."
2. What kind of post would make you want to try on that style? What process would you go through between seeing a post and deciding to try it?	"Actually I never try styles on the post. Because I think that's their style, not mine. I tend to wear sports clothes as it is more comfortable rather than dress clothes" "I don't know what's gonna happen to my thought process. I don't think I will change my attitude and thoughts about fashion."
3. When buying clothes or beauty products, what would be your major	"If I wanna buy a cloth, my consideration is about price cause I'm still a high school student."

| considerations?	
4. Do you consider cultural/historical/ethical/moral issues when making decisions about fashion?	"I will consider cultural issues when I make decisions. I would tend not to buy Japanese brands due to historical considerations, including Bape and Comme Des Garçons."
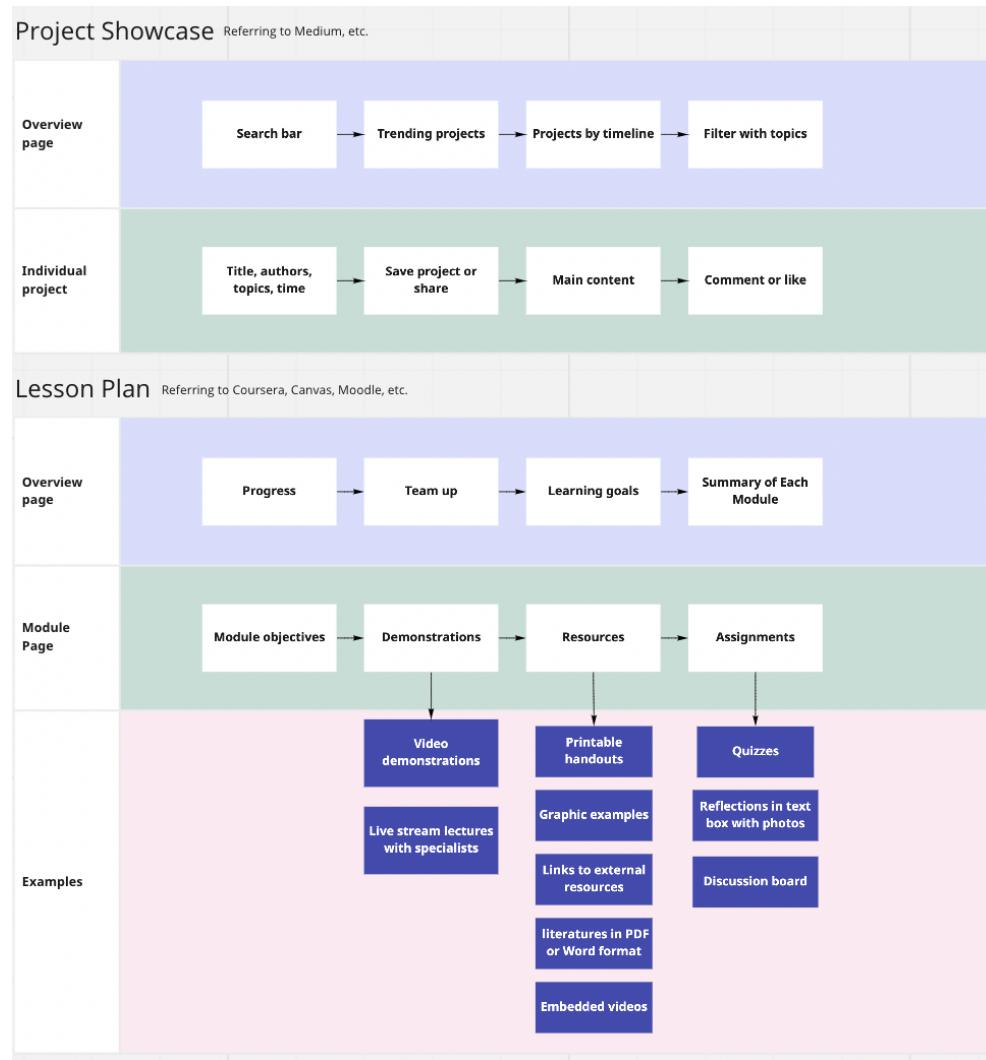
Model for design process

Artsander will implement the Pebble-in-the-Pond design model in building its curriculum because of its affordances toward meaning-making at the individual level through artifact-making. We particularly wanted to utilize a model that allowed for student inquiry into topics of their own interest and choice, as well as what they found personally relevant for future learning. More specifically, we intend to implement a combination of both case-based instruction and project-based instruction, depending on lesson planning and group dynamic. End task will be project-based, through which learners will create their own artifacts in culmination of their individual research. The Artstander curriculum will guide learners to identify and locate "problems, rather than topics or subjects... to anchor the curriculum" (IDT Ch. 38, p. 288) and bolster their perspectives and scopes through mentor feedback and peer review. The research phase in Pebble (in identifying a succession or progression of problems that are part of and inform the larger problem) will take place online-- specifically, through different social media platforms wherein the students will locate prominent cases or examples of their problems.

In adapting the Pebble-in-the-Pond design model, Team Artstander aims to dissect a larger and precarious societal problem-- the prevalent influence of viral social media on adolescent formation of identity and culture-- into a progression of thinking about different but related components of that problem. In doing so, we encourage students to come up with their own solutions on how to counter misogyny, racism, and bigotry on social media platforms, both inside and outside the traditional fashion spheres. Students will identify and expand on their own problems of choice, as presented by artifacts/phenomena they find relevant in online communities. In doing so, Artstanders glean motivation through choice and, more importantly, through aspects of culturally relevant design at the design level of thinking. Artstanders will therefore experience and direct themselves and each other in complex problem solving at higher levels that are also relevant to their larger communities while also learning more about the affordances and constraints of their chosen social medium. In looking at artifacts constructed over outcomes (Hmelo-Silver, 2000) and through self-directed research and inquiry, facilitated by teacher(s)/mentor(s) in constructing artifacts, Artstanders will stage their own interventions on social media as they see fit and relevant to their sense of style and delivery of expression.

Suggested Sustainable Website Structure

Future steps

- Workflow diagram should be able to show a more detailed and clear sequencing of
    a. The process learners would go through
        ○ Dr.Chang reminds us to pay attention to the different experience that different learners would have, and map out the decision points where they experience start to branch out
    b. The feedback and scaffolds that instructors would provide as reactions to learners' specific actions
        ○ I feel that the chart we now have does not have the space to clearly show this part. Do we need a separate chart for that? Like have 1 for describing the user journey, and have 1 for describing detailed scaffolds. Or the latter one could be in written form under the section of "description of functionality"
        ○ And how our scaffolds different in offline and online spaces (see below)

      c. The learning in our program that happens in offline spaces/in-person context (e.g. when learners gather together)
- some might be formal in the camp, some might be informal as a museum visit or window shopping
- Dr. Chang refers it to "cohort, shared experiences"

      d. learning that happens in online spaces (e.g. when learners stay in their home and completes assignments/their own inquiry)
- I feel that we haven't clearly illustrate and distinguish the above 2 parts

- About SM
  a. If our program would be a synchronous camp, then why use SM as the main learning tool? We should clarify this necessity. An really nice point that Dr.Chang mentioned is to facilitate the transfer process to learners' daily SM experiences
  b. If we are also gonna use SM as the main learning tool when learners are not staying in the same learning space synchronously, how could we ensure that they are participating, and how could we track their learning progress? When it is asynchronous, they could just come in at any point.
  c. We should also consider the benefits and challenges of using SM as a learning tool. Maybe the issue about privacy that we previously mentioned in the meeting should be written down somewhere in the doc.
  d. Also, since learners would record their learning progress and outcomes on an SM account (Dr. Chang refers to this as the "change agent"), the real learner group of our program would go beyond those who attend our program, since they could benefit from observing and interacting with these accounts. (yeah we've already mentioned that and I would add that in the section of overall functionality)
  e. Can also add SME/guest speaker reflections for marketing and evals

- About evaluation
  a. We might want to be more creative with how to conduct the evaluation, rather than just through traditional means like surveys
     i. Rubric for every lesson plan (including a set template for async writing responses)
     ii. Cumulative evaluation at the end of curriculum
     iii. Exit ticket/survey/reflection in writing from students
  b. Make aspects of engagement into a rubric?

- About theoretical framework
  a. clarify the relationship between/intertwining of IBL and SDL in curriculum

- Reach out to museums
- Create students' worked examples