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Building Indonesian Animation Students' Persona

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Abstract.
This study is part of a research project which investigates drawing as a knowledge creation process in Indonesian animation students. Research on design education in Indonesia is still scarce, even more so within animation education. This investigation aimed to understand animation students' attributes, behaviors and attitudes, to build an animation students' personae (ASP). The steps in creating the ASP incorporated the concepts of student-centered learning and human-centered design. We collected data through a questionnaire completed by 138 animation students aged 17-25 years old from different higher education institutions in Indonesia. Based on the data, we created four different ASPs to which we have attributed names, demographic attributes, activities, personality types, and perspectives in order to contextualize the lives of animation students.

Keywords: animation student persona, student-centered learning, human-centered design, personality types, animation education

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1. INTRODUCTION

Research on design education have provided significant milestones on its pedagogical system in the last two decades. Some notable foundations for rethinking design education were the development of visual intelligence, ethical sensibility, and aesthetic intuition in students [1]. Others have built around this ideas, further shifting the positivist paradigm [2], allowing interdisciplinary collaboration [3], using a human-centered approach [4], and looking at a broader approach on design project [5].

While some progress has been made in the design education field, there is a major gap between developed and developing countries. In Indonesia, the teaching and learning process still follows the 1960s master apprentice model, where tutors limit their action to the critique of the student's submitted design assignments. Furthermore, the pedagogical process is developed around skill-based training, where a wide variety of design software regulates a more diverse learning experience. Although the model

has produced many great designers who manage to go beyond the limited education standard, we believe that a new approach to design education would help many more students, generating a more qualified student cohort.

Our motivation for this study is to search for new ways to use the rich grounding of design disciplines to inform education in animation, which so far has been overlooked as a source of extrapolation. The study also aligns with the Indonesian government curriculum shift, which focuses on student-centered learning, encouraging active learning that involves critical thinking [6]. Critical thinking as an educational goal has long been proposed by John Dewey [7], who also described this mode of thought as 'reflective'. Many scholars in the art and design fields have picked up his ideas, namely Elliot Eisner, Richard Buchanan, and Donald Schön. Notably, Schön [8] uses the term 'reflective' repeatedly to describe this kind of active learning and the transmission of tacit knowledge taking place in the design studio. The concept is often viewed as the very nature of design professionals and efficient design educators, who have a designerly way of thinking [9], but it is less frequently employed in the classroom. To implement this way of thinking in our case study's context, we should understand the current state of animation students in Indonesia. By using a human-centered design (HCD) approach, we can define their characteristics to allow for appropriate solutions.

This paper describes, tests, and analyzes a HCD technique for creating user characterization, the 'personas'. We gathered data by surveying animation students from several universities in Indonesia. The study aims to build animation student's personas (ASP) as a part of a larger research project investigating drawing as a knowledge creation process in animation education. It is about encouraging learners to become 'reflective practitioners', to help them in their study process. It could also have an impact on further research exploring animation as a discipline and its students as a teaching and learning core.

2. METHODS

This study was conducted through an online questionnaire. Researchers are a Ph.D. team in Portugal, and participants are samples of animation students in Indonesia. We designed a questionnaire with both close-ended and open-ended questions to accommodate deeper insight into the data. The questionnaire's formal application lasted from 23 March to 6 April 2021. To analyze data, we used cross-tabulation with data visualization on spreadsheets for quantitative data and word coding for qualitative data.

The questionnaire aims to get Indonesian animation student's data regarding their attributes, behaviors, attitudes, and facts for building personas. We applied McGinn and Kotamraju's [10] idea to gather data for personas by categorizing students through close-ended questions and understanding their needs and goals through open-ended questions. We tested the questionnaire by peer review, which led to shortening from fifteen to three sections: 1) student's attribute and demographic, 2) student's behavior and personality, 3) student's attitude and facts about animation education. The language used in the questionnaire is Bahasa Indonesia, as it is the student's primary language.

We invited participants and distributed the link for the questionnaire through direct and group messages to the university teachers on WhatsApp. We reached ten universities which have undergraduate animation specializations or study programs in Indonesia. We acquire data from 142 students in total from seven universities. However, due to the duplicates in the student's answers, the valid data are from 138 students.

3. FINDING AND DISSCUSSION

3.1. Sample characterization

The gender of the sample was characterized by 61% (n=84) male and 39% (n=54) female. The age group are: 40% (n=56) age 17-19, 46% (n=63) age 20-22, and 14% (n=19) age 23-25. The majority of animation students are male, which correlates with Smith et al. [11] claim that masculine culture is still dominating the industry. Most of the students come from provinces in Java for about 83%, a number probably influenced by 56% of Indonesian population living on the island. The spreads are East Java 32% (n=44), Central Java 17% (n=24), West Java 11% (n=15), Banten 10% (n=13), DI Yogyakarta 7% (n=9), DKI Jakarta 6% (n=8). 62% (n=85) of the students are from academic high school, meaning that they did not have previous education in animation, 29% (40) are from vocational school, and 9% (13) from various other schools like Islamic school, pesantren, or even university.

Concerning the student's enrollment year, data showed that 32% (n=43) are from 2020, 28% (n=39) from 2019, 21% (n=29) from 2018, 9% (n=13) from 2017, 9% (n=13) from 2016, and 1% (n=1) from 2015. As for the student's current place of education, 30% (n=42) are from Universitas Negeri Malang, 23% (n=32) from Sekolah Tinggi Multimedia Yogyakarta, 19% (n=26) from Universitas Multimedia Nusantara, 12% (n=17) from Universitas Negeri Padang, 11% (n=15) from Universitas Dian Nuswantoro, 2% (n=3) from Institut

Seni Indonesia Yogyakarta, 2% (n=2) from Universitas Kristen Maranatha, and 1% (n=1) not specified.

3.2. Student's activities

The second section identifies the respondent's behaviors and interests. We used check-boxes with predefined categories and open-ended categories to accommodate all the answers about the participant's weekday and weekend routine. Concerning their leisure time activities, we asked an open-ended question. Table 1 below displays the top five results.

Table 1: Animation student's routine.

Category	Subcategory	Frequency
Weekday routine	Taking Classes	78%
	Self Studying	75%
	Playing video games	67%
	Chatting with friends	64%
	Watching TV/Streams service	63%
Weekend routine	Playing video games	78%
	Watching TV/Streams service	75%
	Chatting with friends	61%
	Self Studying	53%
	Hangout	38%
Leisure time	Playing video games	35%
	Drawing	25%
	Watching/Streaming	25%
	Sleeping/Resting	22%
	Studying	16%

The subcategories 'taking classes' and 'self-studying' dominated respondent's answers to their weekday activities. Many students are doing 'self-studying' activities on the weekend. Despite expectation, 22% (n=30) did not answer 'taking classes' as their main weekday activity; possibly they don't attend classes either because they are in their final year or due to the Covid-19 pandemic situation. The table shows that digital entertainment such as playing video games is a significant routine on weekdays, and the main one on weekends, and leisure time. Watching TV/streaming services, follows up on all categories. We can infer from the table that most of the activity is on digital devices, which may keep them from boredom but may impact their creativity [12],[13].

3.3. Student's dreams, challenges, fears, and worries

In the second section, we also used open-ended questions to give respondents freedom in expressing themselves. We coded the student's answers about their dreams, fears, worries, and challenges to categorize open-ended questions. We display the top five answers in Figure 1. It shows that most students dream about working in the animation/design field. The student's answer on their biggest challenge varied so much that it led to a low number in frequency, so a lot of responses have been left out. However, there is a prevalence of 'education related' challenges. We found that student's fears and worries data related to each other: the respondents' 'fears' top answer, 'inability to produce good work' relates to 'not good enough' in their worries category. Also, on the bottom answer, we have 'poorness' subcategories that are the same in both student's fears and worries.

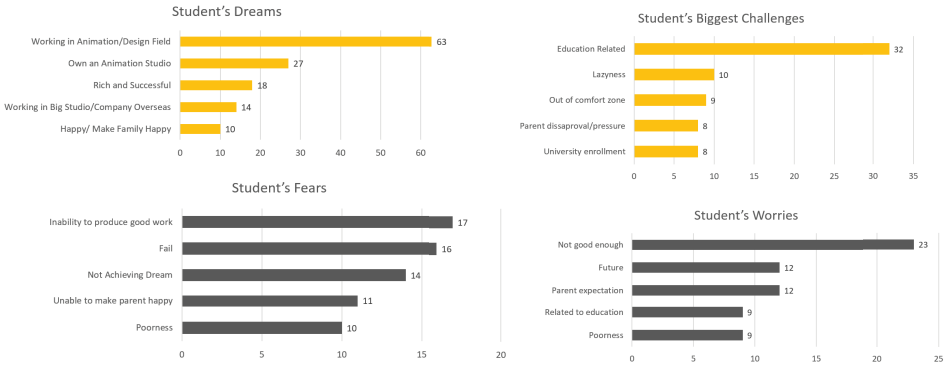

Figure 1. Diagram on students' dreams, challenges, fears, and worries

Figure 1: Diagram on students' dreams, challenges, fears, and worries.

3.4. Student's personality types

We include personality type's questions in the survey to map Indonesian students learning styles. We adapted Myers-Briggs Types Indicator (MBTI) as a practical approach to the process of creating personas, aiming for a reference to prepare the conditional learning according to the student's learning style. It should be noted that although the MBTI test is considered not to be valid, reliable, comprehensive, or independent in scientific terms within Psychology, it remains a useful tool for self-description and ludic purposes. Categorizing students based on these styles only offers a middle ground between treating each student the same way and treating each student uniquely [14].

Nevertheless, personas will become our steppingstone in understanding the students and propose a solution for further research.

For the study, we used four top subcategories of the respondent's personality types as examples since results in 3rd place and 4th place are separated just by one person. The personality types are ESTJ (22%), ISTJ (20%), ESTP (13%), and ISFP (12%). Storm [15] indicates each types correspondence according to their learning styles. ESTJ (Extravert-Sensing-Thinking-Judging) learn best by experiencing, analyzing, and memorizing. ISTJ (Introvert-Sensing-Thinking-Judging) learn best through experience, hands-on practice, and repetition. ESTP (Extravert-Sensing-Thinking-Perceiving) learns best through kinesthetic, hands-on experience, and explicit, logical instruction. ISFP (Introvert-Sensing-Feeling-Perceiving) learn best through exploration, experimentation, and hands-on learning. These four types of learning according to personality fit the design education approach on Experiential Learning Theory [16].

3.5. Building Animation Students Personas

Cooper [17] suggests that after data gathering and analysis, one should look for patterns that distinguish persona profiles. In this study, we identified the following patterns: 1) personality types, 2) sex, 3) age, 4) origin, 5) high school, 6) activities, 7) goals, 8) frustration. Table 2 below displays animation student's personas based on 138 respondents.

From the data, we created four card designs to visualize the personas and bring them to life (Figure 2). These personas reflect the previous data, with a prevalence of male students.

4. CONCLUSION

The study is limited in both quantitative and qualitative data compared to previous research concerned with similar aims [18], [19], [20], the latter due to the pandemic. Nevertheless, the combination of quantitative and qualitative data we proposed showed that data gathering techniques by close and open-ended questions are useful tools to create personas. Building personas is a continuous process and we aim to apply the study in a specific university to focus on our case study context. We also need to consider scenario building for the personas for more engagement, further connecting the discipline of animation to the student's visual culture. The results are a rich source of information that will inform the methodology in a further research project on the investigation of drawing as a knowledge creation process, where the styles of students

TABLE 2: Animation Students Persona.

Patterns	Persona 1	Persona 2	Persona 3	Persona 4
Personality Types	ESTJ	ISTJ	ESTP	ISFP
Sex	Male	Female	Male	Male
Age	20	20	20	19
Origin	East Java	East Java	Central Java	East Java
Highschool	Academic highschool	Academic highschool	Vocational highschool	Academic highschool
Activities	Gaming (87%)	Study (100%)	Class (64%)	TV/Stream (89%)
	Chatting (69%)	Chatting (90%)	Gaming (64%)	Class (78%)
	Self study (50%)	Class (80%)	Self study (45%)	Self study (78%)
	Class (44%)	TV/Stream (60%)	Drawing (36%)	Gaming (67%)
	TV/Stream (44%)	Drawing (30%)	TV/Stream (27%)	Chatting (33%)
	Drawing (6%)	Gaming (0%)	Chatting (27%)	Drawing (33%)
Goals	Working in design/animation field	Get rich and successful	Traveling overseas	Become 3D artist in animation/game
	Building career in multinational studio	Working overseas	Own an animation studio	Make everybody happy
Frustrations	Not having enough skills	Living in poverty	Uncertain future	Lazyness
	Failing the dream	Failing parent expectation	Did not have a decent job	Afraid of loneliness
	Hate to do a visual exploration	Often felt left out in the class	Have difficulty in learning animation software	Rarely create portfolio

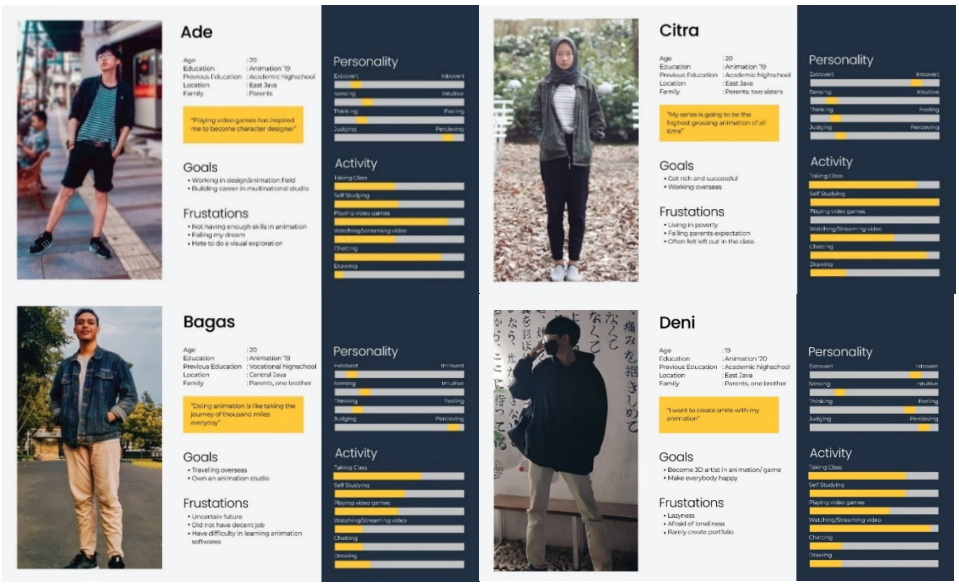

Figure 2: Personas card design.

can be taken into consideration when choosing and designing drawing exercises, since

personality traits are involved in ways of expressing, gestural options and subject matters. This study provides insights into animation student's condition in Indonesia, which is crucial for the development of animation as a discipline. It also shows that 25% of participants choose drawing as their leisure activity, a number we aim to increase by observing animation student's drawing activity and the production of knowledge surrounding it. When applying the results of the present study to drawing, we can make it more pleasurable and its usefulness more self-explanatory.

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