Interdisciplinary skills and integrative tools portfolio

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1.Introducing Ourselves:

My success? -Friendly -Helpful -Creative -Good Artistic sense -Willing to try -Willing to listen	What do others need to know about me? Careless Weak Interpretation skill Weak Comprehension Better in Observation than expression Good at self-learning Sometime not willing to follow the steps
What do I need? -Time management -Communication -Feedback -Trust/Respect -Fun	What do I add? -Flexibility -Structure -Teamwork -Board views -Mindset -Focus

2.Interdisciplinary Debate:

As the jury of the debate session, providing the topic, observing the arguments from two different standpoints and making the decision of confirming the better standpoint is the duty for holding the whole debate. In this debate, the topic is “whether interdisciplinary working process provides better academic learning way to solve specific problems”.

The affirmative side believes that interdisciplinary study provides more divided topics to solve more complex problems by connecting different discipline value and knowledge. For example, the Atomic bomb invention is the outcome of the cooperation of government, industry and science field of knowledge. As in the article “Ten Cheer for ID(interdisciplinary)” which analysis the benefit and barrier implement of interdisciplinary by Moti Nissani mention, all different disciplinary contributions may be valuable. Moti gives an example of studying the nature of political liberties. philosophical, original thinking, historical or science historical account can all have contributions to the subject. The team also mentioned that the development of academic divides different kinds of topic and field without the connection which, therefore, have the need to integrate different field of knowledge in order to find out the common between each study. This point also had mentioned by Moti as he first gives out the opposite point of historical and psychological failure for price raising study, but argue that the products in the Gray area between each area have more attention. Perhaps without occupying the whole knowledge of each field (don’t need to always follow method on its own expertise) because the disciplines are not in practice as sharply demarcated as most theorists suppose. Therefore, the boundary of each discipline actually does not have a clear difference and value can be found in

unexplored-area in the important topics and take place by the interdisciplinary researches. On another standpoint from the team, finding and understanding its common ground can connect different discipline which rewards the good of communication and growing knowledge. If the problem only solves by one field of knowledge, the solution may not be far enough to in any way to take down the problem. For example, political decisions need to take the time to get to consult and find its common ground in the balance of business and environment. Connecting to Moti argument with this point sums up that one of the rewards of interdisciplinary is the unity of knowledge. Moti believes it is impossible to become an expert in ev3erything. But if we only focus on disciplinary knowledge for wisdom, we forget how much we don't know which leads to the failure of unifying the knowledge and the perceived knowledge become one detail part but not as a whole. The other solid point had also declaimed by the team is that creativity and new perspective are the outcomes of interdisciplinary which give a problem an alternative solution. It corresponds to the point with Moti that creative breakthrough and outsider's perspective. Creative is a way of comprehending different things as in the article quotes that "The sociological imagination can also be cultivated" in order to have alternative solutions – "Yet there is an unexpected quality about it, perhaps because its essence is the combination of ideas that no one expected was combinable". The outsider's perspective is the example of new perspective construction as outside wants both cultures seeking and cultures emerging in a country which form into unique insight for perceiving things.

The negative sides believe each disciplinary have its own culture and value for studying and conducting research. Two discipline can have fundamental differences with each other. some researches aim for seeking the truth and fact but some researches are seeking for constructing the fact. Moreover, one thing in different areas of knowledge contains different value and concept. Once can perceived object from a very distinctive angle from other disciplines which is impossible to combine. As in the article "Barriers Against Interdisciplinarity" by Henry H. Bauer, different disciplines have stereotype differences. The various academic disciplines represent different cultures. Also, disciplines are different over what is interesting and what is valuable. Therefore, the primitive working value and initiative direction is already different. Secondly, it is very hard and required a lot of costs to find the common between different disciplinary because some discipline of knowledge require fundamental knowledge or to make sure everyone has the same level in pursuit of knowledge transfer. It would be very inefficiency as time could possibly waste on finding the common ground of two subjects but oppositely one common ground could be solving thing much more direct and time-saving with clear structure and well-preparation. The example the team had shown is that discipline is like a language which only native speaker can communicate. However, if the language is unknown for the researchers, cooperation work is very difficult. Thus, interdisciplinary is hard to implement and needs to spend a lot of cost on the emerging process. As Henry mention, different disciplines have different directions on how to choose research projects, how to evaluate evidence. He suggested the example of humanists and scientists. The former believe that students should take a considerable number of upper-level courses during their study which means study does not require students to have fundamental knowledge but need to have high logical analyzing skills, but

the latter required students to take a large number of lower-level courses to prepare them for advanced work in their special field which means students need to understand the fundamental skill, otherwise study cannot be conducted just like math. If you only know addition and subtraction but you do not know multiplication, it is impossible to conduct deeper formula calculation. This example explains why it is very hard to find the common ground for every intellectual.

In respond of the atomic bomb example from the affirmative team, the team said the atomic bomb is causing the war crisis and threatening on humanity with the weapon which is the failure outcome of interdisciplinary work. But affirmative team respond that lack of enough ethical or social moral disciplinary for inventing the atomic bomb is the reason that forms the bad outcome but not the failure of the interdisciplinary implement.

Reference:
>Nissani, M. (1997). Ten cheers for interdisciplinarity: The case for interdisciplinary knowledge and research.

>Bauer, H. H. (1990). Barriers Against Interdisciplinarity: Implications for Studies of Science, Technology, and Society (STS).

3.Area of knowledge:

This article is to share the different disciplinary of major digital media subject. The new category is recently developed to focus on post-modern of media development in teaching and production industry. To analysis Digital media, we first need to understand what media is. Media is the way we communicate and data transforming as it is referring to the “medium” tool for building up social content and life. The example of media is print media and the press, photography, advertising, cinema, broadcasting (radio and television), publishing, and so on. On the other hands, Media is also the representative of the institutional culture and material products. (Lister, Dovey & Gibblings & Kelly & Grant, 2003) Nowadays Modern society is a global connection with industrial society emerged. Communicate is the main part for creating the social structure as Industrial structures took its characteristics from the rejection, conscious or unconscious, of preindustrial ways. Modern Media is a form of unevenly shared consciousness of persistently external events. Therefore, Media fundamental to our sense of living in a social world. Since the beginning of modernity, media have transformed the scale on which we act as social beings. (Couldry, 2012)

Technology has given the world a new form of media communication along with the appearance of the computer. However, the earliest computer history can track back to world war II with the computer use of the military for connecting the date and information. The computer also help in the cold war for using the simple calculation to help construct the atomic bomb and until later development of email, word processing, voice recognition. (Wardrip-Fruin & Montfort, 2003) Thus, the computer is always a representation of new media communication. Therefore, digital media have the huge connection with computer science, using different variations of code

and simply calculate to create simply click event to the construction of word transferring method such as graph transfer, gaming interaction or data protection and so on. This is all required the knowledge of computer coding skill and implement.

As I mention that digital media is a new concept of communication, it is necessary to discuss what the “newness” of media is in order to analyze the definition of digital media. New media is the new kind of communication in the late 20th and 21st century which combines with new technology in communicating with the global. It plays an important role in mainly entertainment, news and political industries. According to the book “New Media: A Critical Introduction”, although digital television appeared in the mid-late, 20th century, it considered as an old media in nowadays as it is a direct message transfer medium. Thus, the “newness” of media in the modern age is the immersive of virtual reality and the best example is the appearance of the internet. The internet can be seen as the massive virtual multi-player online gaming which brings out a radically and profoundly new kind of media. A new dimension is created in an interactive form, unlike the old media. Therefore, digital media is an interactive and virtual medium for communication.

With the new emerge of the new dimension, digital media is not only mainly use for data transfer in the modern age but have been evolving into variously of function. The way the media is conducted is an important factor in digital media development. New concepts of working with media included the creative management of information, intervention, and control of human-computer interaction, communication studies of ‘face to face’ paradigm and Mutual interruptibility, the study of artificial intelligence, consumer choice technological embody, grassroots democratic exchange and the most fundamental concept – media study of data transfer. (Lister, Dovey & Gibblings & Kelly & Grant, 2003) Those new functions of media are the combination of new concepts and discipline such as psychology, art, design and, history.

Media study involves with the simple idea of meaningful content production. The practical example would be the production of films, animations, TV series or news. On the other hands, different ways of information interpretation can change the meaning of the information as human emotion is produced by social exchange, generate stronger or weaker ties to relations, groups, or networks. (Lawler, 2001) This involves the idea of media affect theory from psychological knowledge. Study how information affects the user help to develop a better human-computer interaction or human to human interface. Therefore, psychological knowledge is concluded to Digital media field.

Simply data transfer is not enough for new media (since everyone can have same approaching on media operation) but needs to involve creative and catchy idea in order to conduct the efficient operation of the technological products of media. The practical example is the creative management of information. How the data is represented affects how we comprehend the information. The early computer revolution involves with the emerging of the interface as computer data is just a massive amount of number and using the media interface to encourage children to

learn computer in order to conduct computer knowledge to the new generation. (Wardrip-Fruin & Montfort, 2003) Therefore, graphical and design concepts have been involving in this disciplinary as it affects how we interact with media.

All in all, Media in the modern age is not only the simple data transfer format but involve complicate operation between deliver and receiver. New concept combining different disciplinary is one of the important ways to achieve creativity in digital media. Such as practical production (coding, photographic, drawing and painting, animation, sound making, mathematical create), method thinking (art concept, idea generating, statistic, data management) or theoretical mind (media culture, history analysis, social analysis, logical thinking) in which also cross-discipline on science, psychological, philosophical, business and political. Therefore, Digital media has a cross-disciplinary approach for the creative industry with the fields of psychological, art, computer science.

Reference:
>Lister, M. & Dovey, J. & Gibblings, S. & Kelly, K. & Grant, L.H. (2003). New Media: A Critical Introduction

>Couldry, N. (2012). Media, Society, World: Social Theory and Digital Media Practice

>Wardrip-Fruin, N & Montfort, N. (2003). The New Media Reader

>Lawler, E.J. (2001) An Affect Theory of Social Exchange1

4. Interview:

What is social justice? (answer from colleagues)
-Human right Could make decisions by its individual and not restricted by society. -Capitalism Everyone has their own freedom and protect the fundamental human right. -Fair distribution of right and resource Fair distribution of right and resource can create equality and reduce the disparity between rich and poor. -How to organizes and operate in more moral and ethical ways Any action has pro and con influence on society or nature. For example, industrial products production help increase economy but is harming nature. Therefore, there are the needs for operating a moral industrial production. -Think of the consequence (in educational, political, law perspective) Any action could lead to unexpected outcomes which cause injustice situation. For example, bad education or lack of education form inequality and ignorant

community same as political. The bad law system can possibility misjudging people. -Find the cure of common metal problems Social injustice causes mental problems such as over-stressed, social anxiety or depression. Finding the rooted of reasons that cause the metal problem can help to build up happiness in social in pursuit of social justice.
Building common ground (by using critical listening & keywords selection)
-Fairness & equality -Relationship between people -The Cure for common mental issues -Thinking of consequence -Rights -Resource -Opportunities and needs - Moral, Ethical
What is social justice? (after analysis- result)
Social justice means the society conducted in a fairness and equality situation where everyone has their fundamental human right and freedom which are not constricted by a country, society or even small community. Also, the resource of the society is distributed fairly. The resource can also be the opportunities and needs which means all people can have suitable improvements in society. On the subjective perspective, social justice means that one individual would be thinking about the consequence whenever he/she try to take action and care for other people's thought by understanding in order to have good relationships with people. Also, social injustice is the causes of mental problems. Thus, cure the common caused social problem helps to reduce social injustice. Finally, people, company, and the government will take its action in a moral, ethical way which care for society more than individual interest.

5. Video by Julie Thompson Klein

In the video, Julie had brought up different examples that showcase the ongoing process of interdisciplinary action. At the beginning of the video, she indicated points of the major trends of interdisciplinarity along with the example that corresponding the point. The first point "New field" trend with the example of comparative literature in the 30s and 40s. Social psychology, biochemistry, molecular biology, and cognitive science have also appeared in the mid-20st century as a new field. Also, the action of "new syntheses, theories, and paradigms" have appeared. For example, the man land shift in geography which focusing on more the built environment. The other trend is the "prominent initiatives" with the example of defense-related research in world war two – the atomic bomb. There is also "a quiet flow of influence" of interdisciplinary as more and more researches conducted in teamwork and collaboration or shared instrument. The role of educational reform is also the characteristic of the trend. We can experience it through the example of many legacies of experimental programs or mainstreaming in general education. Therefore, new majors keep reforming in different institutions. In my personal experience, the new example of the cross-disciplinary field is digital media as the

new media is the combination of computer science skill and graphic user interface. Media is not the pure data transfer purpose anymore but complex functions have been involving for handling fast-paced city. (Wardrip-Fruin & Montfort, 2003) The practical example is the use of VR glass (Virtual reality).

Those examples and trends Julie have been elaborated are having the common reason that occurring the implement of interdisciplinarity from an external perspective. First is the increasing complexity of the real problem. Second is the desire to explore problem and questions that are not confined in just single discipline. She gave out a metaphor that people are never saying they are working on biologic but working on cancer, a specific problem. Next reason is the expanding of imperative which forces intellectuals to strongly focus on the problem rather than purely academic research. The fourth reason is the changing relationship with interdisciplinarity and disciplinarity as intellectual realized that every discipline has some degrees of genealogy related to the interdisciplinary action. Therefore, many self-disciplines' research have resulted in interdisciplinary working efforts. This analysis proves the rewards of interdisciplinary implements which are help solving complexing problems and help unify the knowledge (Nissani, 1997) as every area has some degree of similarity to other field and many interdisciplinary examples are problem-oriented forms of new discipline for solving complex problems. Moreover, the purpose of the study can be separated from what is interesting and what is valuable. (Bauer, 1990) Many discipline orientations are not focusing on real-world trends but the pure one discipline knowledge study. It is not surprising that the intellectuals have the desire to explore problem as what is interesting is not useful for the real world and without the knowledge affection for the real world, the meaning of study also lost.

The next session Julie had pointed out what implement can help to achieved interdisciplinarity in the whole educational system. The first practical implementation is building Mobilizing Network which means that the subject is not categorized by the static step or building of discipline but connecting different field of intellectual in order to achieve massive interconnection network. In addition, place and space is an important factor for system construction. Place is a fixed location with stable boundaries. However, space is a practice place that created through action and practices. Thus, the perspective on the institutionalize change is one of the ways of implementation. In the researches perspective, implementation can take place by using problem-oriented research methods that crossing the boundary between academic and public or building team and team toolkit with integration and implementation experience or skills. Studying can be conducted not in curriculum area but in the research area because the research areas that focus on problems usually leads to the different area of Knowledge. In the technological perspective, the involving of virtual participation help achieve interdisciplinarity. For example, many book concept can be reinterpreted by visual language or mapping which help people to find the common ground or comprehend different concept between different areas which she describes digital platform is dynamic, flexible, transactional and so on. Finally, she also predicted that the computer can be working through not only an individual as a platform but a network base platform.

In the ending session, the drivers of real-world interdisciplinary are elaborated in the internal perspective (opposite from paragraph two's external factors) which is first, working theoretical foundation. Second, working with practical research. Third, knowledge that has relevant concepts and methods. Fourth, the shift of computer platform to network and fifth, network of interaction and synergies. Interdisciplinarity can usually take place because of the five factors. However, no matter how influencing of this five-internal base is, achieving interdisciplinarity is still based on the research complexity, size, and scope. It is worth to mention a factor that "knowledge that has relevant concepts and methods" are more easily to combine because each discipline is represented as a culture with its unique study process, language, value, and purpose. Moreover, "truth" can have a different meaning in different fields. "truth" in science can be an exact answer or fixed data from nature. But "truth" in theory field can be human-constructed. (Bauer, 1990) Therefore, I agree with the point Julie had said "the fields which have the relevant concepts and methods the driver of field emergence and combing research needs to depend on its complexity, size, and scope.

The course main purpose is the introducing interdisciplinarity and building concept of working in a group and communicate in order to learn the skill of achieving knowledge sharing and combing outcome which are relevant to the issues she indicated in the video. The three main issues are the first, current trend of interdisciplinarity. (history) Second, what implement action that can help achieve interdisciplinarity (methods) and third, what is the reasons that achieve the interdisciplinary (factors: internal & external) The history helps us to understand that the interdisciplinarity implement is possible and real word example have already appeared a lot. The method shows us what skills are possible to achieve knowledge combining and the third issue, factors, encourages us that there are the needs for interdisciplinarity to conduct in the academic system. Therefore, the three issues Julie have conducted is related to the course.

Reference:

>>Wardrip-Fruin, N & Montfort, N. (2003). The New Media Reader.

>Nissani, M. (1997). Ten cheers for interdisciplinarity: The case for interdisciplinary knowledge and research.

>Bauer, H. H. (1990). Barriers Against Interdisciplinarity: Implications for Studies of Science, Technology, and Society (STS).

6. A closer look to interdisciplinary:

As computer technology became more and more advance, digital age comes in to our daily life for communication, interaction and education. New interdisciplinary subject “Creative media” have been found in many university for student to focus on real world digital development trend which is not only focusing on computer technology(coding), but also include interface design (interaction platform), media production (video, animation), art and social science (philosophy, psychology) in order to create more humane digital tool to enhance our diverse daily working process.

While digital media have been taken the shape, many cyber problems are generated such as information overflow, piracy, internet bullying and privacy invasion. The problem of this new subject is that students are only being taught to create more advance media platform or digital information but did not consider the ethical consequence that bring out in our society to pursuit more positive and manageable outcome possibly. Therefore, Law studies is a potential perspective to take a place in digital media.

Law studies can provide suitable guideline for media development. Students can be given the new ideas base on the existed law as the consideration for the develop direction which help to create product with less negative side effect. For example, since the internet has been broadly use by teenager, the side effect such as bullying has also been occurred. If the developers have based on law knowledge to decide the working perspective, this problem may possibly reduce. The reason is that internet is the mirror of the real-life society (Lievens, 2010), bullying problem has been already happening long before internet appears, using this previous experience from the law in media production can alternatively provide solution of reducing the bullying problem. Internet have the basic right to follow, but this follow must respect other fundamental right such as freedom of expression and information. (Lievens, 2010) Therefore, media have the need for balancing the social right and human right which study law can provide good idea to students on their work in pursuit of an alternative efficiency outcome.

A good digital platform or information can enhance the legal situation of the society. Students can base on the imperfect legal system to develop new technology to create a better legal process. For example, personal date protection in 60s did not consider in any of the field of computer development which programmer are not interesting in cryptographic. The U.S. National Institute of Standards (NBS) is also weakling the standard of cryptographic so they can monitor people’s data. Scientist notices that the human protection standard is imperfect so they study the cryptographic by themselves and create better system that later substitute old the standard and serve the worldwide till now. (Levy, 2001) This case shows that knowing the law standard leads to the developers decided to confront and improve our law system in order to create better digital age. Therefore, Learning the law regarding on the media industry and knowing the insufficient of the system in order to have suitable media development can help establishing a better legal system.

Preventing copyright issue and efficiency products promotion is also the positive effect of studying Laws. Since Internet user have the freedom to upload information, freebooting become a problem that people can re-hosting original authority and infringe on creator. The need for clarifying what is freebooting and recreation have a very obscure line. For example, Facebook have been developing a new tool to tracking freebooting (Foxx, 2015). It would have better to have laws knowledge in order to balance both creators' and re-creations' copy right. Most countries execute enforcement of copyright for protecting the copyright holder. (Li, Correa, 2009) But several jurisdictions are also having criminal penalties for copyright infringement. (Manta, 2001) As designer and programmer usually need a lot of references from other people's work as their material for their work. Knowing what is copy right system can prevent them the copy right issue or clarify what needs to be protect and what other people can use from their work which can work more efficiency on products selling as many developers usually do not have a clear comprehension of the copy right system which lead them spend a lot of afford on handling copyright process.

Besides, Students can think of the media industry not only in product producing perspective but systematic production perspective which can lead to the changing way of interaction or communication. For example, Lawful knowledge can give you a more diverse definition of what is privacy right and what is digital right. A lot of date management developers are studying on the balancing of privacy and freedom of digital use. They base on the definition of privacy right (PRM) and digital right (DRM) to develop the management system which have shown different behavior and outcome of management. (Kenny, 2002) Students can study those lawful systems in order to change the design perspective in a systematic which can more easily fit in to our legal society. Therefore, laws study provides more wider perspective on digital media, especially on data management.

All in all, Digital media is the new disciplinary subject that created for students to solve contemporary media problem which focusing on digital development and creation. I believe adding the study field of law can improve the learning quality and lead students to not only creating but also manage their works. Knowing the law system of digital industry help student to choose the correct path of digital development. For example, how to manage data, what product have potential negative effect on the community, how to protect copy right and human right to prevent bootleg or date leaking or how to make a better business environment for media production. All of these ideas is the potential guideline for students to generate the idea that provide better solutions for the society. Therefore, there is a need for law study to involve in field of digital media which can enhance the learning quality.

Reference:
Eva Lievens, 2010 - Protecting Children in the Digital Era: The Use of Alternative Regulatory Instruments

Steven Levy, 2001 - Crypto: How the Code Rebels Beat the Government Saving Privacy in the Digital Age

Chris Foxx,2015 - Facebook announces new tools to tackle video theft

Xuan Li, Carlos Maria Correa, 2009 - Intellectual Property Enforcement: International Perspectives

Irina D. Manta, 2011- The Puzzle of Criminal Sanctions for Intellectual Property Infringement

Steve Kenny, 2002 - Applying digital rights management systems to privacy rights management

7.Study questions on interdisciplinarity

1. describe one global problem that can only be solve by interdisciplinary?
   -environmental sustainability & agriculture (classmates' answer)
   -business digitization community (my analysis)
   -As advance technology appeared in the modern age, digitization needs to be involve in order to catch up the society. Building up digitization operation can help strengthen the manufacture for profit increasing and increase job opportunity on technique field and help the development of virtual network connection (development of digitization). This goal needs to be achieve as the business environment influenced by different factor and become more complex and there is the increasing imperative of communication. This interdisciplinary implement was achieved by combining the field of science, business and digital technology. I personally think that sociology is also a potential field to add up in the implement as it aims for the goal of creating better job management possibility and organization the business labor industry. The reward of this interdisciplinary action is the deep understanding of collaboration and integration which help identifying later collaboration projects' direction.

   *Reference:
   Case study example one: Digitization in the service of the business community

2. Is interdisciplinary is more flexible on solve contemporary problem?
   -It depends on the size or scale of the problem. As each discipline represented one of a culture, it is hard to commit one common ground of knowledge in order to work. But relevance ideology and concept of knowledge come earlier on find the common ground then using the knowledge to achieve crosshatching communicate as similar discipline have higher degree of same concept that related to interdisciplinarity. However, flexible is easier when it takes place in problem solving level of research as complex problem itself is caused by different discipline. Therefore, the inter-related concept is also come to be more prominent.

3. Do we need institution or specific characteristic to work on across discipline?
   -Yes. There are many factors to affect the academic structure which can build resistance on knowledge combine. For example, the institutional construction can as a place could draw the limitation between each discipline since place is separated by static step and static research which do not providing the network for cross boundary communication. If institution is built by space network, providing multiple and diversity function, intellectual can learn to understand the discipline oriented form different field in order to achieve inter-connect of area.

   Besides institution, the specific characteristic of across discipline are technology assistance and Team building and toolkit constructing. Advance technology such as internet help created unlimited virtual community which represented as a mobilizing network and knowledge are no long restricted by fixed catalog. New visual mapping technique also have transfer hard understanding concepts into visual representation which help intellectual from other area to precise new things in a more efficiency way in pursuit of across discipline implement. On the other hands, building teamwork can help improve teammates' communication skill in order to achieve critical listening, thinking concept from different area of perspective, which help students to build up working toolkit that suit for different knowledge in order to commit cross boundaries action.

8. Creating your portfolios

Compare to the single discipline study method, interdisciplinary study and working method is better on solving problem. I think disciplinary structure has its own benefits on specific knowledge perceiving because more detail and focus can be given on one single discipline and an efficiency working process can be conducted as one discipline share the common concept and thinking that formed a unique academic culture. By using the similar ideas and concept, research can be conducted in a systematical way to focus specific problem or explore specific facts. However, real life problem or nature facts can be associated with different concept and field. One object or subject could have different but related idea. Thus, cross discipline approach actually help improving the working process. if we only study in one discipline, we forget that there is still a lot of knowledge have to be learn as discipline draw the line unlimited amount of knowledge.

Interdisciplinary method encourages students to think about the issues that have never accounted before and help them to build alternative solution by combine two different idea in one to solve problem. This process is where creativity take its place. Although it needs to take many time and effort to building up the common ground and finding the common culture in order to cooperate, but once the cross emerging is successful, the result can be innovative and revolutionary. On the other hand, interdisciplinarity achieve the primitive goal of learning which is to unify what we have learnt and explore different possibility and using knowledge to achieve different outcome.

I was studying art in high school in Hong Kong and could never appreciated using computer program to draw an artwork until I study creative media and digital media in both Hong Kong and Germany. I am glad that I can understand the importance of learning different skills as I have learnt using coding, design, and psychological perspective to create artwork. Otherwise, my working art could be very stiff and un attractive. For example, the way animation created can be hand drawing graphic and combine them or using computer turning machine to generated movement. These two approaches can be found uniquely in two different discipline computer science and art. But combing 3d generation with 2d hand drawing can create unique style with much efficiency production period. Therefore, interdisciplinary help achieve me to general new idea creatively and help me to understand that there are many different possible outcome if we have more skill and knowledge from different area.

All in all, I think interdisciplinary approach is a better on learning and working process compare to develop in single disciplinary because I think its help to create new ideas and unity knowledge and fulfill the knowledge blind spot or the gay area in academic structure. I hope more university and industry can initiate interdisciplinary structure of teaching and let every discipline involve more concept from other area so that student would not be only restricted in their own world view.

Through the course on introducing and teaching interdisciplinary, different skills have been initiated and learnt. One of the skills is the communication skill. In detailed it means that I need to prepare objective of perceiving knowledge and the pro and con of different implementations. Taking classmate opinions by critical listening in order to try thinking the method and ideas from other people point of views. This can prevent the avoiding the blind spots of once thinking and help to understand the concept of interciplinarity in an alternative way. Moreover, always listening to others opinions in a respectful way and actively initiative ideas from own and other.

The other skill is to using graphical structure to compare the difference between each different discipline organization. By using even using a simple comical photo, graphical material can be interpreted the concept of interdisciplinarity in a more creative and dynamic way, turning the complicated definition in to an easy and simply explanation, let people outside the field to understand new academic structure easily.

Beside personal communication skill and graphical material initiative, form team for debating with the representative of single discipline and interdisciplinary stand point to electorate the pros and cons of the interdisciplinary help us to understand even interdisciplinarity have its own insufficiency and help analysis the ideas from different people to find out which academic approach is better even both disciplinarily and interdisciplinary have its pro and con.

The more practical toolkit to reflect on advantage and disadvantage of interdisciplinarity is to design question and exanimate colleague’s in order to evaluate the understanding of interdisciplinarity from each other or using problem oriented topic to building the common base for defining one concept, defining social justice is the perfect example. If the topic change to interciplinarity interview, the pro

and con of interdisciplinarity can be explain not by individual by a whole group of understanding of the concept as we compare people's opinion and find out the common point of views.

All in all, communication skill, use of graphical material, team debate and building toolkit format such as testing and combining is the skills I have learnt to reflect on the advantages and disadvantages of interdisciplinary work.

After taking this course, the initial idea on the utility and value of interdisciplinary have a huge change. I believe that interdisciplinary approach is a better learning and working implement that can deal with more imperative and complex real word problem. Although interdisciplinarity is hard to achieve with self-insufficiency and required huge time consumption, but real world problems force us to take action on crossing the boundaries and force us to constructing the study and research on problem oriented direction.

Before I taking the course, interdisciplinary method for me is just a simply alternative approach (for using in digital industry) of studying but did not realize the many real-world aspects need to approach with alternative thinking and knowledge and did not realize that interdisciplinarity massive development only have begin in the mid 20st century. As a media student who only focus on production, I never thought about how the discipline come from or with what standard to form it. But now I have deeper understanding on how one academic is constructed and knowing what is initiative method on achieving interdisciplinarity and what are the causes of the increasing speed of crossing knowledge communication.

To summary, I become more open mind on accepting new knowledge and willing to learning more knowledge from other area and never draw the boundaries on my own as purchasing knowledge and unify knowledge are the meaningful process for following the world and the fundamental ideal of studying. I have also learnt how to initiative the interdisciplinary method when new knowledge is emerging. Therefore, I become more pay attention on the academic's and discipline structure's value, seeing interdisciplinarity in a more important degree. I hope that the future academic values can shifted from discipline separation into the huge knowledge connection network and intellectuals no longer draw line of the content study. I also believe this approach with become common in the future with the influence of technology and increasing complex and imperative issues.

9: Breaking down a complex issue

Copy right issues in Digital age	Direct Symptoms: Digital Crime is uncontrollable: copyright productions' serious illegal spreading ⬇
	Underlying Symptoms: -Data overflow: incomplete data management system -Imperfect system monitor -Copy right infringement -Unclear Internet right definition -Weak cryptography protection ⬇
	Contributing symptom: -strength digitalization system (data management, cryptography function) -break down internet user right: increasing user monitor and tracking down user browser history (privacy invastion cause) -track down illegal copy right website -school educational and Civic education (advertisement, propaganda)
	Direct Causes: Developer did not consider the side effect of the system design and related it into public perspective. ⬇
	Underlying Cause: -Only focus on system user interface design -Only focus on contents production -Strong process of function building without complete data protection oriented -Did not consider the consequence accursed in different social aspect. -Did not consider the roots management of how internet is being used (Not well-define of internet user right & what consider to be the copy right and original contents) ⬇
	Contributing Factor: -Leak of rooted control of internet and digital media organization and operational process -Leak of law studies to clarified the internet using standard -Need to connect the social construction aspect -Law concept of Causal relationship unintelligent

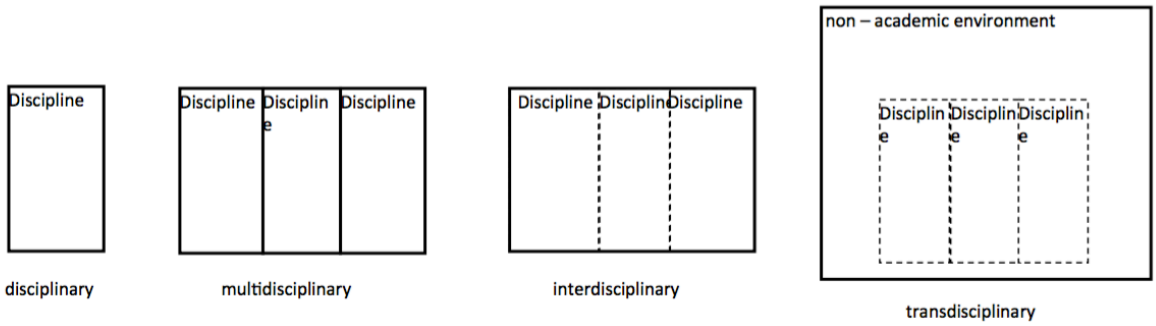
10.Essay structure

interdisciplinarity:

What it is?

Absorbing and perceiving knowledge, using method for solving real world problem is fundamental behavior as a human being to survive and construct well-organizing social in order to improve our civilization. How do we organizing this knowledge and what method should use for solving problem is an important question to constitute a good academic environment for learning and an efficiency working progress.

Since the nature and society provide massive amount of knowledge and information, it is difficult to perceive all of the knowledge. Therefore, the concept of building discipline has been appeared. But recent academic have shift to more on interdisciplinarity approach. To understand what interdisciplinarity is, we need to compare different approach to explain it.

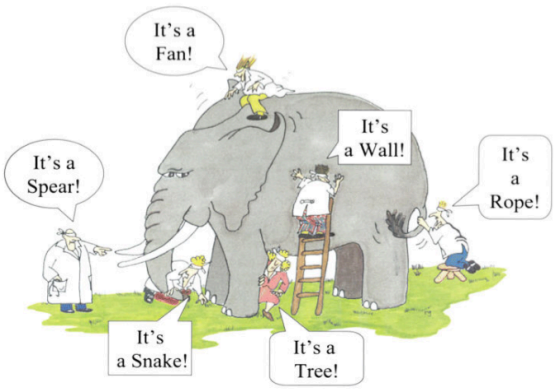


Disciplinary
-signifies the tools, method, procedure, example, concepts, and theories that account coherently a set of objects or subject. - shaped and reshaped by external contingencies and internal intellectual demands overtime. - an organize and concentrate experience that focus into specific world view which share an epistemology or beliefs about how and how much we can understand about the nature of the world we live in. Symptoms: -Distinctive analytical tools, concepts, theories and methods; -Specialized vocabulary or symbol systems; and -Different indicators for acceptably demonstrating understanding (a musical score, a lab report, a legal brief, etc.)
Multidisciplinary
-A group composed of members with varied but complimentary experience, qualifications, and skills that contribute to the achievement of the organization's specific objectives. -Lining up the contents and knowledge from different field of knowledge. Symptoms: -Sum up the research outcome from individual discipline -Collect the analytical tools, concepts, theories and methods from different single discipline

Interdisciplinary
-Interdisciplinarity research is a mode of research by teams or individuals that integrates information, data, techniques, tools, perspectives, concepts and/or theories from two or more disciplines or bodies of specialized knowledge to advance fundamental understanding to solve problems where solutions are beyond the scope of a single discipline or area of research practice. Symptoms: -perspective combining -systematical management -diversity field of knowledge -Network connection of intellectual -Crosshatching -Crossfertilizing -Inter/transecting
Transdisciplinary
-Research efforts conducted by investigators from different disciplines working jointly to create new conceptual, theoretical, methodological, and translational innovations that integrate and move beyond discipline-specific approaches to address a common problem. Symptoms: -New ideology -No problem-oriented approach (addressing a challenge) -Connection with academic and outsider's public perspective -Holistic apporoach

Why is it important for research?

Nowadays academic structure tends to use the discipline as to separate the knowledge in pursuit of a deeper focus on specific research and more efficiency working environment since communicate with similar ideas and language help the working process. However, structure knowledge into discipline actually create resistances on the solving problem and learning. Here is the reason and these reasons are the explanation of why interdisciplinary study is important to research.



First, the content of a discipline has it limitation as discipline draw the line to separate the knowledge. The fundamental ideals of learning are the analysis what we have learnt and turn it in to useful facts or information. If one resist on culture

emerging of different knowledge, they will forget how much they do not know and purchased knowledge will become lock own in a small cage which have broken the fundamental ideas of learning which is unify knowledge.

Second, the real-world problem become more and more complex and imperative. Many problems cannot be solved only in one discipline and interdisciplinarity can help solving complex problem.

Third, creating new perspective and alternative outcome. It is no doubt that every method for solving problem cannot be completely get out of the generation of negative effect. The important of creating alternative outcome is to replace the incomplete problem solving method in order to reduce the negative side effect but increase the practicality.

Fourth, elevate individual study skill and communication skills. To implicate knowledge emerging, intellectual must go outside their expertise and working with different people. Thus, teamwork and communication is unavoidable which help individual to understand the important of respecting different point of views, think from other people's perspective and training their communication and cooperation skills. In the study perspective, one can absorb more new concepts that have never accounted before to achieve the goal of keep learning ideals.

Therefore, interdisciplinarity is very important and it generate a better outcome on individual, benefic the academic system and provide good problem solving to the world.

Interdisciplinary methods: What are their main features?

Individual attitude features:

Critical thinking	When it comes to achieve new knowledge learning for crossing the boundary, one cannot always thinks that its own discipline knowledge is the fact but need to think in another person mind. It is necessary to criticize what concept can work on the problem and what cannot in order to construct the research direction. So, researches can learning new knowledge for the problem in an efficiency way.
Perspective taking	First listening to other people opinions and learning and digest the concept. selecting what the common ideas is and what different ideology is in order to build up the common ground, try to include as more perspective as possible to giving a space and consensus for different discipline to conduct practical research. Moreover, more perspective taking, more possible solving can be invented.
integration	Intellectual should learn the knowledge from different field and base on the problem itself to integrated the related concept on the problem. Knowledge being separation just because they have in indirect relationship. In fact, all concept from each field is interrelated. Thus, researches can understanding the different between each concept and try to

	use create way to link them in together even the value can be different as all discipline have certain degree of relevance and similarity. were

Group interactive feature:

Group Debate	Forming two different ideals of group for debating encourage students to think a problem in two different perspective or the pro and con of one problem in order to achieve practical analysis of a problem with more than two disciplines.
Interview	Finding one topic or problem to interview different people from different field, the answer can be very different. It is a useful tool to collect new perspective and understanding how people think.
Exam	Design questions and examine different people can help each other to understand how much they know and understand the concept which help to strength one's concept and knowing what aspect of knowledge should we learn additionally to make sure everyone have same base on working on crosshatching subject.

Personal and problem evaluation oriented features:

Personal Introduction with table	A method of evaluate what we know and what we do not know which help to identify what position ones would be and what ones should learn in a cross disciplinary research.
The cause diagram	A complex problem can be caused by many reasons. Some of the reasons is not so obvious that researchers could possibly forget and just focusing on direct factor. Using the cause diagram can help researcher to find out all the factors and base on the factors' belonged field of knowledge to design researches.
Case study	Studying different successful application of interdisciplinary can provide referencing guideline on how to do cross knowledge research
Elevator pitch	Help define the research purpose, research property, research difficulties and what group of people the research is serving at.

Interdisciplinary tools and capabilities: What does it mean to be an "interdisciplinary" researcher?

Attitude
Interdisciplinary researcher should have open mind for accepting new field of knowledge and have the motivation to learn new knowledge, giving out great effort to manipulate difficult concepts from other area. It means that they are always willing of stepping out of their comfort zone to accept the challenge.

Moreover, interdisciplinary researcher should be willing to listen other people's opinion, spending time to interpreted the new ideas and turn them into new alternative explanation or solution by using own conducted knowledge which required creative mind and ideas.

Also, knowing own limitation is one of the important attitude as achieving interdisciplinary approach always need to working with team and own knowledge should not be the leading the hold team concept but each knowledge should be fairly distributed in the team for creating fairness and equality of culture exchange. To achieve that, every researcher should know what they know about and what they do not which means that they don't draw limitation from their discipline and knowing that knowledge have infinites amount and what they do not know is more than what they know.

Besides that, researchers are always willing to try. Since discipline have separated indirect relationship with other discipline, a big amount of interconnect gray area of researches topic have not been discover and ones could never know whether study in this gap could lead to positive outcome or not. It is possible that time being wasted because of choosing the wrong gray area for researching and developing goal. Therefore, researchers need to be able to keep optimistic on taking risk and to try different direction of application.

Personal skill

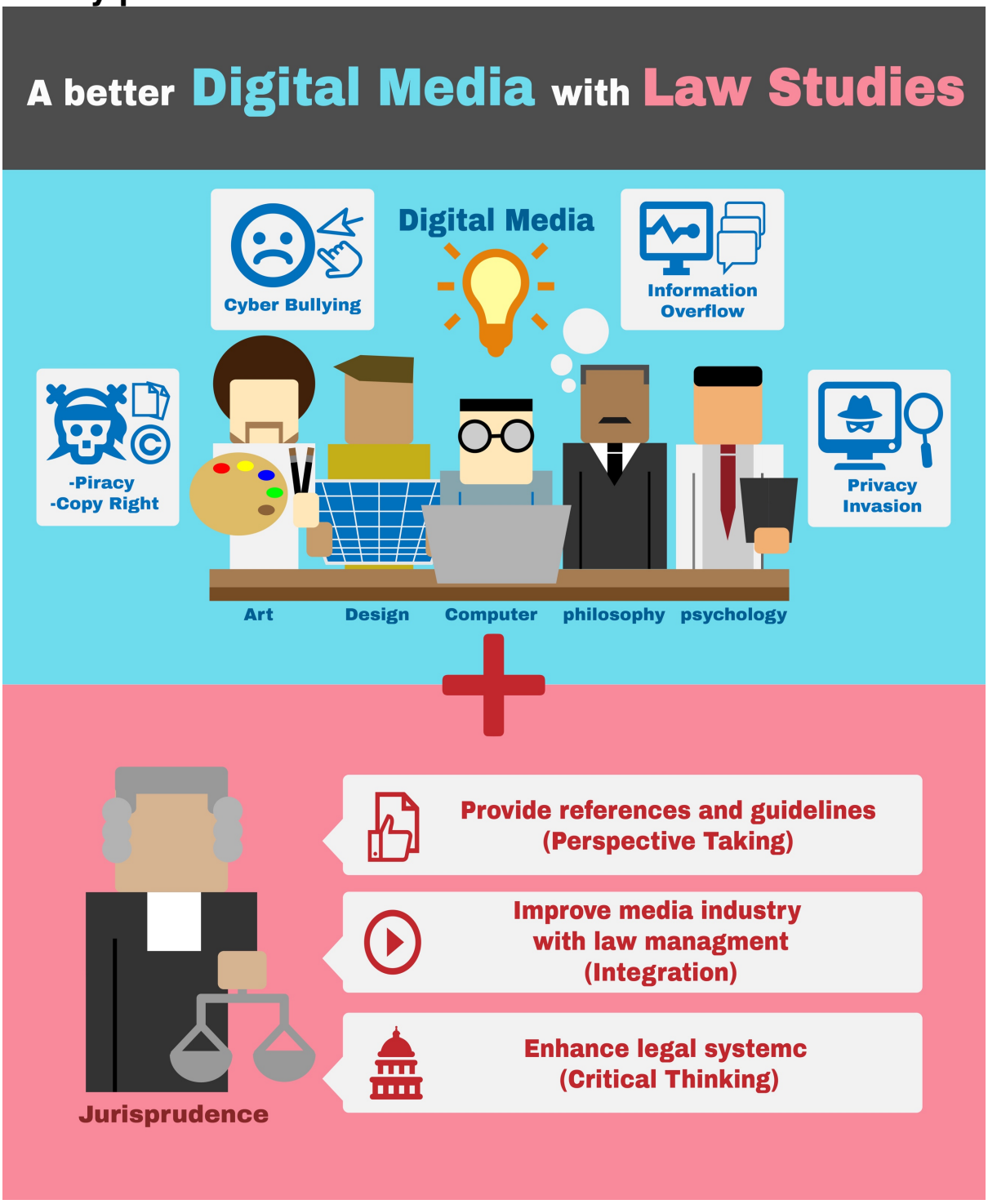
Decision making skill:
As I mentioned before, study the gray area between different field is a big risk. Therefore, a good decision making skill can define and construct good researching goals and reduce the cost of research.

Integrating skill:
Since a discipline is representing a group of culture, ideas and concepts and study method can be completely different. Therefore, a good integrating skill means that you are able to use creative way and think outside the box to find the common concept in order to close up the gap differentiate and the culture barriers of two or more disciplines. Finding relationships, commons or the links is the result of integrating skill.

Organizational skill:
Unlike the integrating skill, organizational skill is not help for find the common concepts or knowledge but how to organize the defined common concepts which means to organize the same and different concept of crossed information. Building common ground is the result of organizational skill.

Communication skill:
Good Communication skill help researchers to explain complicated knowledge to other different researchers. The medium of the skills is not only referring to language communication but also can refer to different media to explain the concepts such as digital visualization or any methods that are mentioned in question 2. The main goal is to deconstruct the knowledge in a clear way for new involving participators to understand it.

11. My poster:


A better Digital Media with Law Studies
Digital Media
Cyber Bullying
Information Overflow
-Piracy
-Copy Right
Privacy Invasion
Art
Design
Computer
philosophy
psychology
Jurisprudence
Provide references and guidelines (Perspective Taking)
Improve media industry with law managment (Integration)
Enhance legal systemc (Critical Thinking)