

Creative Universities for Preparing the Creative Class in the 21st Century

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ABSTRACT This paper addresses the question whether universities today are creative enough to construct new bodies of state-of-the-art knowledge to teach to their students and to pioneer innovative inventions to solve the economic, social, and ecological problems of the fast changing world. Research funding has fueled research activities in campus to foster invention and facilitate the creative process with the expectation that the funding can generate economic benefits for the country. Instead, it yields a very small rate of return as the research may generate few technological innovations or economic payoff. When some university research receives criticism as it failed to generate practical payoff in terms of meeting the needs of industry and the public, some universities have proved themselves to be successful to become the world's innovative power house. Those successful universities with their creative leadership have prepared their graduates to be innovation ready to enter the creative class of the workforce. To cultivate creativity in this fast changing world, this paper proposes five dimensions for universities to focus on: optimizing the interaction of individual, domain and field; flowing the spirit of creativity to the whole university; using technology and activating entrepreneurship, and moving from second- to third-generation creativity. Third generation creativity comprises the social-ecological worldview, ethics and interdisciplinary approach, capability approach, and cosmopolitanism and promoting English as a Lingua Franca for universities residing in non-English speaking countries.

Keywords: creativity, higher education, creative class

The world has changed rapidly and dramatically, and how about universities? How can universities with their core business—teaching and research—prepare leaders and professionals of the fast-changing world in the creative and innovative era of today and tomorrow? Are universities ahead or behind the fast changing world in terms of invention, management, entrepreneurship, and social-ecological integrity? For centuries the vital role of universities in preparing economically valuable intellectual resources and its social and cultural vitality is obvious. They have developed and disseminated new knowledge and critical thinking, essentially for preparing good teachers, engineers, physicians, scientists, lawyers, businessmen, designers-to name but a few--of today and tomorrow. They are the potential professionals, leaders and drivers of the fast-changing world. In a creative era, of which the economy is driven by knowledge and creativity, the societies' reliance on universities has also tremendously been increasing. Following the increasing growth of its importance, the success of a university is predominantly judged through research performance. Every university wants to produce world-class research to meet innovative economy and to make sure that it will provide students with cutting-edge formal learning and teaching environment, and state-of-the-art knowledge. For instance, to maintain the supremacy of the USA in the world, President Obama clearly preserved its pre-eminence through research and innovations, and he firmly declared:

“We know that the nation that goes all-in on innovation today will own the global economy tomorrow....” (From: White House Office of Science and Technology Policy, March, 2014, p.1).

After the declaration, in the Fiscal Year 2015 the President proposed a \$135.4 million spending plan for research and development in universities, compared to the the 2012 Federal Government investment of \$90 billion. Research funding fueled research activities in campus, and university-based inventors were successful to file over 12,000 patents in 2008, and 3,280 were approved. However, regarding licensing fees, federal investment generated a very small rate of return, because not all of the ideas produced were successful in the marketplace. Patents do not guarantee that the products are used and can successfully generate revenue. In fact, research funding in the universities are not only from the federal government, but also from so many other resources. It is a concern, because university research does not only take large financial investment, but also considerable academic staff time. Once again, supported by large fundings, universities are a place for the community of scholars to dedicate themselves for the advancement of knowledge creation, and for cultivating creativity, but the output of universities shown by the patents they produce does not guarantee that they are successful to produce innovative products to fill the market needs. Universities need to improve themselves; they need to be more creative.

CREATIVE UNIVERSITIES: THE WORLD'S INNOVATION POWERHOUSE

As mentioned above, although in general university research in the USA has not led to positive economic return, according to Reuters the US university system is still the world's innovation powerhouse. Top innovative universities still contribute to the wealth creation of the country. Stanford University as the first ranking innovative university in the USA and the world, has proved that serious efforts in conducting research and to educate future leaders and entrepreneurs can still be immeasurably rewarding. Stanford university's alumny generates \$2.7 trillion annually, and since 1930s have created 5.4 million jobs in their 39,900 companies, such as google. Hewlett Packard, Cisco System, Gap, Nike, Tesla Motors, etc. This amount is equal to the position of a nation with the world's 10th largest economy.

In spite of the background of weapons research and development, the postwar creation of Silicon Valley by Stanford University under the creative and innovative leadership of Fredrick Terman, for example, was first inspired by how MIT was successfully recognized as a world-class university. The main reason was that there was a good collaboration between the university and the local companies. As a result, excellent research jobs were growing around the greater Boston Area. The link between the university and the companies became stronger, and when graduate students were placed in those companies for internships and job opportunities, the MIT-local companies cooperation became even stronger, and the conversion of university research and knowledge development to useful products became more intense.

It is always remembered how Stanford University initiated the industrial powerhouse by first asking two students William Hewlett and David Packard to set up a company in the land provided by the university. This environment gave birth to the inventors such as Steve Jobs and Marc Andreessen. Until today Stanford University is still the first place ranking of innovative universities, as it is followed by MIT and Harvard University. Both professors and students never cease to innovate and develop partnership to keep Silicon Valley truly up-to-date and excell.

In Stanford University professors are granted one day per week release time for consulting work to the industries around the campus. This opens up to the opportunity to make use the professors' problem solving expertise in the real workplace. During the practical activities professors will know what skills companies need from graduating students, and this information is very useful for the revision of course content, or the creating of new courses or sometimes new departments.

According to Reuters the 10 most innovative universities in the world today are all in the USA, except two, as shown in Table 1.

Table 1: The Ten Top Innovative Universities according to Reuters

Rank	University	Country
1	Stanford University	USA
2	MIT	USA
3	Harvard University	USA
4	University of Texas System	USA
5	University of Washington System	USA
6	KAIST	South Korea
7	University of Michigan System	USA
8	University of Pennsylvania	USA
9	KU Leuven	Belgium
10	Northwestern University	USA

Among the 100 top innovative universities, 46 are in the USA, followed by Japan with nine, and France and South Korea both with eight. Among those onehundred universities, Asian universities in the list are only from Japan, South Korea, China and Singapore.

It started in the USA, but today creative and innovative movement continues to grow and has spread around the world. Universities have committed on the role on transferring research to industry, generate new inventions and patents, and spur-off its technology in the form of startup companies. They have also proven key contribution to regional development, too (Florida et al., 2006).

UNIVERSITIES IN INDONESIA IN THE CREATIVE ERA

There are 4312 tertiary education institutions in Indonesia; 372 are public and 3940 are private. However, none is listed in the 100 world-class innovative universities. Innovative universities still belong to wealthy and advanced nations, and they are also an important element for the driver of state economy. While Indonesian universities have not emplaced themselves in the list of 100 top innovative universities, coterminously Indonesia still ranks 115 in the Global Creativity Index, as shown in Table 2.

Compared to the other ASEAN countries involved in the ranking, Indonesia as a large country-the world's 15th-largest country in terms of land area and the fifth in terms of population-still needs to work harder to improve its rank. Seven countries out of ten in Southeast Asia were rated, and Indonesia still ranks the lowest on the Global Creativity Index, as shown in Table 3. Apparently Richards et al.'s (2011) concern about the under-recognized, underdeveloped and under-rewarded of creativity as higher human potential (3U's) is still taking place in Indonesia.

Table 2: Indonesia among the Ten Top Countries on the 2015 Global Creativity Index

Rank	Country	Technology	Talent	Tolerance	GCI
1	Australia	7	1	4	0.970
2	USA	4	3	11	0.950
3	New Zealand	7	8	3	0.949
4	Canada	13	14	1	0.920
5	Denmark	10	6	13	0.917
6	Finland	5	3	20	0.917

7	Sweden	11	8	10	0.915
8	Iceland	26	2	2	0.913
9	Singapura	7	5	23	0.896
10	Netherlands	20	11	6	0.889
115	Indonesia	67	108	115	0.202

Note: GCI: Global Creativity Index

The Global Creativity Index (Florida et al., 2015) is a broad-based measurement based on the 3 Ts of economic development—talent, technology and tolerance. It rates and ranks 139 nations world wide for overall measure of creativity and prosperity.

Table 3: Indonesia among Other ASEAN Member Countries on the Global Creativity Index

Rank	Country	Technology	Talent	Tolerance	GCI
9	Singapore	7	5	323	0.896
42	Laos	--	97	23	0.555
52	Phillipines	54	65	53	0.487
63	Malaysia	24	69	101	0.455
80	Vietnam	45	104	73	0.377
82	Thailand	38	84	105	0.365
115	Indonesia	67	108	115	0.202

There are many factors that contribute to the creativity of a nation. One factor is how early the nation has deliberately started to strive for creativity. Indonesia began to be fully aware of the importance of creativity in education when UNESCO first declared the 21st century as a creative century. This is in contrast with the USA. More than a half century ago, when J.Paul Guilford gave his APA (American Psychological Association) presidential address in 1950 he had pointed out the very important nature of creativity research in the USA. His speech was as short as one word-Creativity, but it was successful to make a paradigm shift. It gave birth to the movement of creative research in the USA, and J. Paul Guilford was one of the founders of the psychology of creativity.

In fact, universities should play a key role for developing the nation's creativity, as Runco (2004) highlighted that creative behavior can be strengthened and integrated into one's character through education. Although like intelligence, different people have different levels of creativity and Maslow (1968, p.143) described it as a fundamental characteristic inherent in human nature, creativity will be lost or buried as the person gets enculturated. Children are normally very creative and divergent in thinking, but this potential has been suppressed by the society that expects intellectual conformity from them (Sternberg, 1999, p. 93; 2006; and Robinson, 2011).

THE GOAL OF CREATIVE UNIVERSITIES: PREPARING THE CREATIVE CLASS IN THE WORKFORCE

The idea of going to a university in the creative age is to embark upon the creative class, although some people were born creative and do not need tertiary education participation to enter the creative class (Batabyal & Nijkampf, 2010). Universities are at the center stage of spreading creative skills and shaping intellectual capitals, and in general, according to Peters and Besley (2013), education is at the centre of the economy and creativity nexus. Basically, creative skills include the production of new ideas, aesthetic forms, original works of art and

cultural products, scientific inventions and technological innovations, and solving others' problems.

Today universities need to creatively respond to the ongoing changing world where capitalism is taking a new shape. It has shifted from its previous industrial model to a creative and knowledge model. Human resources are valued as talented people, and they are called human capital. The talent produces creativity, a factor of production that never depletes or worn out, and become the driver of economic growth in today's creative economy. There is a shift of the workforce from the capitalists and the working class, to capitalist, creative class, and working class. In the past the working class took 50% of the whole workforce in the advanced countries, but today it has shrunk to 20 percent. In the USA roughly 30 percent of all employed people belong to the creative class, while in larger cities they have made up of more than 40 percent of the workforce.

The key difference between the creative class and the working class is that the members of the working class are primarily do routines, while those of the creative class engage in complex problem solving. They value creativity, individuality and difference and they share the economic function of creating new ideas, new technology and new creative content. Their values are in contrast with the traditional values of homogeneity, conformity and fitting in (Florida, 2012, pp.8-11). Creativity also involves the ability to synthesize and to take risks. There are varied forms of creativity; a creative engineer invents and a creative marketer develops his entrepreneurship.

If developing countries want to improve their position in the world, they should also learn the attributes of the creative class and prepare their citizens to embark on the class. The tertiary education system, especially, needs to encourage and harness creativity, because the creative class has proved itself as a key driving force for economic development of post-industrial cities in the United States.

To make their graduates adequately innovation-ready, universities in developing countries need to strive to be part of the creative class movement. Otherwise, in this fast-changing world, they will fall behind, and they will only witness that the creative class only belongs to the technologically advanced countries. As a society is the product of their education, and the quality of education is also the mirror of the society, being the driving force and agents of change, universities in the developing countries need to seek new strategies to accelerate creativity and innovations.

CULTIVATING CREATIVE UNIVERSITIES: THE FIVE PRINCIPLES

There is still no concrete data about the size of the creative class in Indonesia, but it is inferable from the report of the 2016 National Statistics Agency that 11.34 percent of the population completed post secondary education, 27.40% completed senior secondary education, while the rest 61.26 percent was the aggregate of those who completed junior secondary education, primary education, or hardly received any education. Although the creative class is not just a proxy measure for post-secondary graduates, and it is not only shaped by levels of education attainment, it seems that Indonesia still has a small share of the creative class.

Now that the creativity level of Indonesian human resources is still lower compared to other countries in Southeast Asia, universities need to propel creative thinking and innovation, and highlights the importance of creative skills for change and for the success in the 21st century. One leading mission of a university is to prepare the creative class of a nation. Creativity is both a process and a product. It is a process to generate new and useful products, practices, services, or procedures, and it is also the production of useful solutions to problems,

or novel and effective ideas (Amabile, 1996). When creativity has value, it becomes innovation, and innovation is the prerequisite for long-term survival of any organization (Shalley et al., 2004; Binnewies et al., 2004).

To cultivate creativity universities need to tirelessly facilitate the developmental nature of creativity, in spite of inhibiting it. Creativity as a concept should be well understood, So far, in spite of its importance, creativity as a concept has not been fully understood and defined. Policies, facilities and instructions should be mobilized to strengthen instead of squeezing creativity out.

To cultivate creativity, this paper proposes four dimensions to focus on: optimizing the interaction of individual, domain and field; flowing the spirit of creativity to the whole university, using technology and cultivating entrepreneurship, and moving from second to third generation creativity. This paper adapts Swirski's (2013) concept of third generation creativity and articulates it as encompassing the social-ecological worldview, ethics and interdisciplinary approach, capability approach, cosmopolitanism and promoting English as a Lingua Franca for non-English-speaking universities.

Optimizing the Interaction of Individual, Domain and Field

The success of creativity is not centered around one individual, but the interaction of three elements. Universities need to optimize the interaction of the three of elements: the individual, the domain, and the field. The individual is the talent or the human asset. They produces creative work, ideas, art, or new discovery. They are not just bright people, but they are creative people. Bright people are able to express unusual and stimulating thoughts, but creative people can express fresh and original ideas and make important discoveries. These creative people use symbols of a given domain to come up with a new idea.

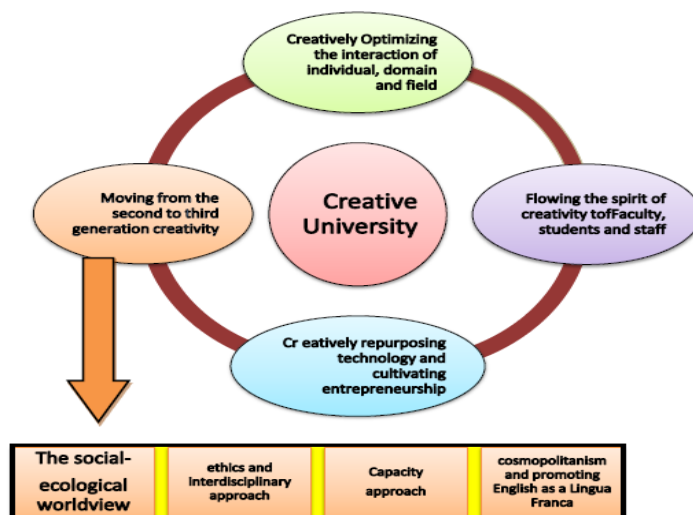


Chart 1: The four dimensions to focus on for creative universities

Their thoughts or their actions have the potential to change a domain, or to establish a domain (Csikszentmihalyi, 1997, p. 6).

The domain is the areas of specialized knowledge, such as mathematics, biology, physics, art, and more. It includes the tools, rules, conventions, knowledge, norms, and systems of techniques, codes, or symbols that help a person create or discover new things in the domain, while the field is the collection of experts who recognize and validate the innovation. They are the the communities of practice who make judgments and give the influence to the domains

about what is worth doing at the cultural or social level. They will direct how a symbolic domain in the culture is changed. They are the gate keepers of a domain. For examples, a collection of art teachers, curators of museums, collectors of art, critics, administrators of foundations and government agencies are those who will decide what can be recognized, preserved, and remembered. Some fields are very conservative and they reject most novelty, while others are more liberal in allowing new ideas into their domains.

Optimizing the Creativity of the Faculty, Students and Staff

A creative university optimizes the creativity of the faculty, students and staff. Creativity is not only restricted to the faculty, but also the staff and the students. The spirit of creativity should flow through the whole university. The faculty, students and staff need to work together for creativity and innovation. They should be involved in discovery, pushing the limits, taking a step to the unknown.

According to Amabile (1983), to perform in a creative manner, two conditions are necessary. First, the individual must have the ability to produce novel and original outputs related to the specific task. Being creative on a task requires two elements; that is, the expertise in the task domain, and the ability to engage in cognitive processes related to creativity. The second is that the individual needs to be motivated not only to engage in the task, but also to produce a creative output on the task. Therefore, to prepare innovative-ready graduates teachers need to become good role models for their students, inspire them, and keep themselves engaging the students.

Using Technology and Cultivating Entrepreneurship

As universities with their creativity and inventiveness have driven technology change, at the same time universities should wisely choose and utilize technologies for teaching and learning, especially for creating and sharing ideas and content, as well as finding creative solutions and outcomes. The employment of technology in education is not in isolation, but it should consider the opportunities for creative education. According to Henriksen et al, (2016) it requires forethought and planning in the use of technology. Since most digital tools like Facebook, smart-phone, twitters, are not designed for educational purposes, it requires the teacher's creativity to repurpose them. Technology also offers the the possibility of creative sharing and creative output across global contexts.

Today the technology of academic publishing has also developed the open access system, create easy access, great speed and lower cost to research materials. This advancement has reduced inequalities in intellectual opportunity across the globe, and a key step for universities to become creative universities Roberts, 2013).

A creative university needs to develop creative entrepreneurship. It is not just to teach entrepreneurship courses. Being a creative university, it should be able to extend the frontier of knowledge according to its time and its place; it should also serve the society for economic growth. Research in creative university should have an impact for intensive economic activity. Okpara (2008) calls it as knowledge with economic potential and economic power. The knowledge should be available and usable to the industry, and it can be transformed to business ventures. The faculty research is potentially the students' umbrella research and students will adopt and be inspired by the innovativeness of their professors' research, and they will use university as their workshop to obtain a first-hand experience about innovativeness and marketable knowledge. Knowing marketable research will promote the students' mental productivity. Knowledge is a commodity and creativity is the capital.

Moving From Second to Third Generation Creativity

The notion of the third generation creativity is introduced by Swirski (2013). This notion goes beyond the boundary of neo-liberalism, as education should go beyond economic imperatives. The third generation creativity that leads to the ideal practices of higher education of today and tomorrow rests on six key dimensions: a social-ecological worldview, cosmopolitanism, a capability approach, ethicality, multimodality and pedagogy. This paper uses some of her ideas on key dimensions, and adjustment are made and proposed to be more comprehensive and relevant to non-English-speaking countries, like Indonesia. The adjustments result in five key dimensions: the social-ecological worldview, cosmopolitanism, ethics and interdisciplinary approach, capability approach and English as a Lingua Franca.

The third generation creativity (Swirski, 2013) is beyond the first and the second generation ones. The notions of first (big “C”) and the second (small “c”) generation of creativity were introduced by William and Dawson (2008). “C” creativity is the processes and products of collaborative and purposeful activity; it is intuitive, introspective, inspiring, and etherial. The outcome is invoked through serendipity and randomness. The “c” creativity is augmented with economic ethos. It becomes the driver in the digital economy and becomes the creative capital. Creativity does not only naturally belong to individual genius, but it is learnable, observable and team-based. Creative capital is connected to university pedagogy which results in a framework of creativityenhancing learning environment in higher education. According to William and Dawson (2008) 75 percent of Australian universities are committed to creative learning outcomes. In the second generation of creativity, productivity is more important than responsibility. In contrast to “C” and “c” creativity, the emergence of the third generation creativity generates wise creativity, which is a morally-, ethically-, and ecologically-oriented creativity (Sternberg, 2003; Craft, 2006; and Craft et al., 2008).

The Social-Ecological Worldview

Expanding the second generation creativity, the third-generation creativity is social-ecological, and relies on conscientization or critical consciousness for a more sustainable interrelationship between the social and natural world. Swisky (2013) understands that a university has the responsibility to transform the world to avoid social and ecological disaster. Using Barnett’s term (2011) she highlights the importance of the notion of ecological university, which takes seriously both the world’s interconnectedness and the university’s interconnectedness to the world. The neoliberal ideology has the potential to lead universities toward the subordination of both teaching and research to corporate objectives (Radice, 2013).

The new worldview brings together a range of new values that ideologically can completely be in opposition to mercantilization in the second generation of creativity. The demarcation can potentially cause tension, but it is creativity that makes the second generation in a constantly changing process toward the third generation. The two can link or well interwoven together before the third generation creativity can completely replace the second generation one. It is a constantly changing process toward idealism.

According to Olssen & Peters (2005) neoliberalism is one element of globalization, and in global neoliberal environment teaching and research in universities have been commodificated and marketized. Knowledge is the most important form of global capital. Individuals have lost the freedom they had in the classical liberal environment, because the state has intervened and made them competitive entrepreneurs. Performativity—reflected through strategic planning, quality assurance, etc.—is stressed, and it replaces autonomy and academic

debate which leads to deprofessionalism. All these practices may result in opportunism, dishonesty and unreliable behavior.

To respond to this situation, the social ecological worldview keeps compassion at the foreground and cares about the environment. In this light, it expands beyond the interest of an individual to a broader social and material interpretations.

Ethics and Interdisciplinary Approach

In a complex world like today we have increasing issues and scandals in all domains of life; universities begin to integrate ethics into their curriculum to match the mission and vision of their universities. Today we have more emerging problems than any time before, and interdisciplinary skill is an essential resource for addressing problems. Also, in this complex world we need to develop interdisciplinary understanding in order that we can be more sensitive to ethical issues, enlarge our perspectives, foster critical thinking, advance problem solving skills, and more comprehensively explain phenomena (Towell et al., 2012).

Ethics is a perspective for deciding how to act and how to analyze a variety of complex problems and issues. When ethics is applied to education it will address moral features of educational activities. According to Swinski (2013), from a social-ecological perspective, the interplay between ethics and creativity is multi-temporal. Third generation creativity requires the ability of recombining present interactions, while considering both past experiences and future consequences across both our human and physical worlds. The environment is one element of the future ecological discourse because human beings can only survive in a harmonious and sustainable environment.

Ethics is important in university creativity, because every academician is responsible to other people and history. He has to go beyond his own individual spheres of interests. According to codes of ethic teachers have the obligation to recognize the supreme importance of the truth and to transmit the truth, and to stimulate the spirit of inquiry. Also, the future generations and their academicians will certainly be critical to the knowledge and theories produced by their predecessors, while we leave them with environmental, health, economic and political problems, in spite of our technological advancement. Therefore, creative universities are ethical and humanist universities for solving the problems of mankind.

Kačerauskas (2015) posits that human beings always believe that they are superior towards his natural environment and they have the capacity to change the environmental balance. The fact is, however, on the one hand, that the more they think that they are stronger to their environment, the more hostile the environment is towards them. On the other hand, the human beings should be stronger to the nature to survive. In the light of this paradox, certain disharmony and unsustainability of the environment always exist. This paradox reflects Darwin's theory of evolution which is based on two inseparable ideas. The first idea is that the organism has to fight in the hostile environment, and the second is that only the fittest survives and develops towards higher organisms.

As a result, human beings are expected to be the agent to transform certain environmental disorder towards better order, both in the social and natural environment. As academicians are the core of the creative class (Florida, 2012), ethically they are expected to go beyond his own individual disciplines, and employ the interdisciplinary approach for developing academic creativity, because academicians such as scientists, philosophers, sociologists, psychologists, economists, media theorists, political scientists, and urban theorists will work together in one creative discourse for the benefit of the society. Issues developed by the academic ethics is equal to critical thinking. Academic or intellectual life, virtues and creativity are inseparable

because virtue is nourished by creating scientific ideas that should be realized both in the social life and in the individual life of an academician (Kačerauskas, 2015).

Holism or interdisciplinary approach becomes more important when decision makers have to face a variety of questions and problems. However, most academics and decision makers incline to use a single disciplinary means in solving the complexities of social problems. One reason is that they have not received interdisciplinary education and training. Until today universities are still discipline-based. Developing interdisciplinary skills is developing the skill of using insights relevant to academic areas in solving problems. This is not a simple skill, and universities need to provide their students the opportunity to develop this skill, and implement the ethic of interdependence (Mulej et al., 2006). Important research topics often transcend the scope of a single discipline, because interdisciplinary pushes fields forward and accelerates scientific discovery and technological innovations (Tuana, 2013). Tuana also argued the importance of developing the model of interdisciplinary practice based on ethical-epistemological principles. In response, universities need to respond to the issues of institutional, disciplinary barriers, epistemic barriers, of which the boundaries of the three areas are porous.

The Capability Approach

The capability approach was first pioneered by Amartya Sen, a moral philosopher, welfare economist, and a Nobel prize winner in economics, and Martha Nussbaum, a philosopher. The term capability approach is new, but the idea is much influenced by Aristotelian conceptions of flourishing as the basis of the good human life (Johnstone, 2007). Everyone has to flourish, that is to promote the core of virtue ethics, that is to exhibit outstanding performance of one's task.

In light of the third generation creativity, Swirski (2013) cites that the capacity to be creative is interrelated to finding solutions to specific situations and occurring practices. Capabilities are dynamic, deliberative and performative, and she quoted Dewey (1928) that both context and change are crucial features of how capabilities evolve, becoming part of our series of situations or experiential continuum.

The capacity of an organization or the creativity of an organization such as a university resides with the individuals. As we believe that capacity is dynamic, instead of static, training and professional development are very important (Azadegan, 2007). In universities capabilities are not narrowly defined skill sets; they are complex, so that they need broad and rich capabilities. This capability is not only for the increased aggregate economic gains as expected by the neoliberal ideology. Instead, it contributes towards opening up dialogue practices aligned with a social-ecological imagination. It entails mindfulness both for meaning-making and for decision-making (Swirski, 2013).

Cosmopolitanism

Cosmopolitanism is another dimension of third-generation creativity, and creativity in this context is a collective, local-global approach of creativity. In this perspective creative practices in universities are not isolated, but interwoven with one another across geography, spaces and places (Swirski, 2013). Cosmopolitanism itself is a vision of the world that sees all humanity belong to the same community, regardless their national, religious, cultural or political affiliation (Strand, 2010). According to Britez and Peters (2010) neoliberalism has primarily looked at international students in research universities as a strategic economic resource, but in the creative cosmopolitanism, universities are a networked environment of

transnational spaces. Cultivating cosmopolitan perspective, they create the globally aware citizens ready to exchange ideas. In other words, cosmopolitanism in creative universities is not about the neoliberal marketing strategies of corporate universities, but encompasses the political, social and cultural dimensions relevant to the practice and experience of being a world citizen.

Although the term cosmopolitanism (Greek: *cosmo politês*) was not new, as it was first coined by Diogenes the Cynic (412–323 BC), and its revival is much influenced by the global political crisis, refugee crisis, and energy crisis (Hooft, 2014). Universities need to collaborate, to creatively address and solve the problems, and to develop a global ethics through which they can articulate and exercise their global responsibilities as a bridge between the local and the global. Brites et al. (2010) emphasizes that universities are not corporations, because they are not only for economic development but for offering opportunities for the development of intellectual, social and life skills to their graduates.

English as a Lingua Franca

Concerning cosmopolitanism, English proficiency is a crucial tool to bring professional success and interconnectivity of universities around the world. English is the language for cross-border relationships and global flows of people, information, and knowledge. However, English proficiency has become a linguistic challenge for higher education internationalization in non-English speaking countries, especially in the Kachruvian expanding circle countries, but it is an advantage for the inner circle ones. This is a challenge that never takes place in inner circle countries. Kweldju (2016) has coined the term language branding to describe the competitive identity of English in higher education institutions. Even to participate in short-term international mobility, for example, more often than not students and scholars from expanding circle countries have to demonstrate evidence of an adequate level of native-speakerbased conceptions of proficiency.

Kachru (1985, pp.366-7) introduced an influential classification in his three circles models. English is playing a crucial role in higher education, Kachruvian expanding circle countries. The first is The Inner Circle, which is made up of those speakers who are native speakers of English, such as those living in the UK, USA, and Canada. They are traditionally used for English norms by the speakers of the other two circles of countries. The Outer Circle countries refer to the former colonies of the members of the inner circle; for examples, Singapore, Brunei Darussalam, and Nigeria. Most of those countries were the colonies of the UK or the USA. The third is the Expanding Circle countries, where English plays no historical or governmental role, but it is learned as a foreign language for its importance in business, science, technology and education. It is the largest circle which includes countries such as Indonesia, Denmark, and China.

Kweldju (2016) proposed the need of a new instructional focus, new attitudes and new curricula for the teaching of English. The teaching of English should be shifted to ELF (English as a Lingua Franca) perspective. ELF is the use of English as a contact language or a common language between people who do not speak English as their mother tongue, e.g. between two engineering professors from Indonesia and Japan. Although ELF contains a large number of non-standard forms, but it serves as a successful means of communication. Their goal is mainly to use English for communication in short contact situations. With respect to this goal, the focus of the teaching of English should be on oral communication first before it shifts to the integrated four skills. Fluency must come before accuracy, and English should be taught lexically-based. The teaching of English at the tertiary level should be focused on developing the students' oral presentation skills, and the instruction should be student-driven.

CONCLUSIONS

Universities in the 21st century should continue to be a source of innovations and new directions for the changing world and contribute to the wealth-creation of the country, especially when neoliberal strategies have been adopted and implemented in higher education. Universities should play a key role for developing the nation's creativity, and are responsible for preparing the creative class of a nation, that is the class which always engages in complex problem solving tasks. World creative universities have proved themselves to become the world's innovative power house through their world-class research. Most of those universities are in the USA. Only a few universities in Asia belong to the top creative universities, and none is in Indonesia.

Now that the creativity level of Indonesian universities and human resources in general are still lower compared to other countries in Southeast Asia, universities in Indonesia need to work harder to propel creative thinking and innovation. They need to reform themselves and to operate in new ethos and ethic. When Indonesian higher education management has just started to adopt the neoliberal strategies in their governance, top creative universities have already combated the effect of neoliberal practices in higher education, especially the infiltration of economic rationality, and have adopted the ethics of social-ecology. Universities need to rely on the critical consciousness for a more sustainable interrelationship between the social and natural world, and they have the responsibility to transform the world to avoid social and ecological disaster.

To cultivate creativity, this paper proposes four dimensions for establishing creative universities: optimizing the interaction of individual, domain and field; flowing the spirit of creativity to the whole university, using technology and cultivating entrepreneurship, and moving from second to third generation creativity. The concept of third generation creativity is developed based on Swirski's (2013). It overarches the social-ecological worldview, ethics and interdisciplinary approach, capability approach, cosmopolitanism and promoting English as a Lingua Franca for non-English-speaking universities.

REFERENCES

- Amabile, T.M. 1983. *The social psychology of creativity*. New York: Springer Verlag.
- Amabile, T.M. 1996. *Creativity in Context: Update to the Social Psychology of Creativity*. Boulder, CO: Westview Press.
- Azadegan A., Bush, D., & Dooley, K. 2007, Design creativity: static or dynamic capability? *International Journal of Operations & Production Management*, 28 (7), pp. 636-662.
- Barnett, R. 2011. The coming of the ecological university. *Oxford Review of Education*, 37 (4), pp. 439-455.
- Batabyal, A. & Nijkamp, P. 2010. Richard Florida's creative capital in a trading regional economy: a theoretical investigation. *The Annals of Regional Science*, 44(2), pp. 241-250.
- Binnewies, C.; Only, S., Nielsen., C. 2008. *Journal of Managerial Psychology* 23(4), pp. 438-457.
- Britez, R.G. & Peters, M.A. 2010. Internationalization and Cosmopolitical University. *Geopolitics, History and International Relations*. 2(1), pp.34- 61.
- Craft, A. 2006. Fostering creativity with wisdom. *Cambridge Journal of Education*, 36(3), 337-350.
- Craft, A., Gardner, H., & Claxton, G. (Eds.). 2008. *Creativity, wisdom, and trusteeship: exploring the role of education*. London Corwin Press.

- Csikszentmihalyi, M. 1997. Intrinsic motivation and effective teaching: A flow analysis. In J. J. Bass (Ed.), *Teaching well and liking it: Motivating faculty to teach effectively* (pp. 72–89). Baltimore, MD: Johns Hopkins University Press.
- Dewey, J., 1928. *The Philosophy of John Dewey*. New York: Holt, 1928.
- Florida, R., Gates, G., Knudsen, B., Stolarick, K. 2006. *The University and the Creative Economy*. http://creativeclass.com/rfcgdb/articles/University_andthe_Creative_Economy.pdf
- Florida, R. 2012. *The Rise of the Creative Class: Revisited*. New York: The Basic Book.
- Florida, R., C. Millander & K. King. 2015. *The Global Creativity Index*. Toronto: Martin Prosperity Institute, Rotman School of Management.
- Henriksen, D., Mishra, P., & Fisser, P. 2016. Infusing Creativity and Technology in 21st Century Education: A Systemic View for Change. *Educational Technology & Society*, 19 (3), 27–37.
- Hooft, S. 2014. *Cosmopolitanism: a philosophy for global ethics*. Durham, NC: Routledge.
- Johnstone, J. (2007). Technology as empowerment: a capability approach to computer ethics. *Ethics and Information Technology*, 9, pp. 73–87
- Kačerauskas, T. 2015. Creative ecology in academic environment. *Filosofija. Sociologija*. 26(3), pp. 239–248.
- Kachru, B. B. Standards, codification, and sociolinguistic realism: The English language in the outer circle. In: Quirk, R. and H. Widdowson, (eds.) *English in the World: Teaching and Learning the Language and the Literature*. Cambridge: Cambridge University Press, 1985.
- Kweldju, S. (2016). Higher education internationalization needs a new instructional focus, new attitudes and new curricula for the teaching of English. *JACET Selected Papers*, 3, pp. 68-97.
- Maslow, A. 1968. *Towards a psychology of being* (2nd ed.). Princeton, New Jersey: Van Nostrand.
- William, E. & Dawson, S., 2008. Teaching for creativity: towards sustainable and replicable pedagogical practice. *Higher Education*, 56, pp.633–643.
- Mulej, M., Kajzer, S., Potokan, V., Rosi, B. & Knez-Ried, J., 2006. Interdependence of systems theories – potential innovation supporting innovation. *Kybernetes*, 35(7/8), pp. 942-954
- Okpara, O.F. Building an Entrepreneurial University for the Challenges of the 21st Century - The Ethiopian Perspective. A paper presented at 2008 International Council for Small Business World Conference. Halifax, Nova Scotia, Canada, June 22-25, 2008.
- Olssena, M. & Peters, M.A., 2005. Neoliberalism, higher education and the knowledge economy: from the free market to knowledge capitalism. *Journal of Education Policy*, 20(3), pp. 313–345.
- Peters, M.A. & Besley, T. (2013). Introduction: the Creative University. In Michael A. Petera & Tina Besley. *The Creative University*, Rotterdam: Sense Publishes, pp. 1-8.
- Radice, H. (2013). How We Got Here: UK Higher Education under Neoliberalism. *ACME: An International E-Journal for Critical Geographies*, 2013, 12(3), 407-418 .
- Richards, R., Kolva, J. Atkin, M., Cheatham, H., Crocker, R., Ockuly, M.D., Goslin-Jones, T., Jones, C., Kasian, S.J., Kenny, R.M., and Smith, G., 2011. Creativity Revalued How Professors, Students, and an Innovative University are Turning the Tide, *NeuroQuantology*, 9(3), pp. 468-93.
- Roberts, P. 2013. Openness, closure and Creativity: Knowledge Production in 21st century universities. Introduction: the Creative University. In Michael A. Petera & Tina Besley. *The Creative University*, Rotterdam: Sense Publishes, pp. 131-44.
- Robinson, K. 2011. *Out of our minds: Learning to be creative*. Oxford, UK: Capstone Shalley, C.E., Zhou, J. and Oldham, G.R. (2004), -The effects of personal and contextual

- characteristics on creativity: where should we go from here? *Journal of Management*, 30(6), pp. 933-58.
- Sternberg, R. J. (Ed.). 1999. *Handbook of creativity*. New York, NY: Cambridge University Press.
- Sternberg, R.J. 2003. Creative Thinking in the Classroom. *Scandinavian Journal of Educational Research*, pp.325-38.
- Sternberg, R. 2006. The Nature of creativity. *Creativity Research Journal*, 18(1), 87-98.
- Strand, T. 2010. Cosmopolitanism: Critical Concepts in the Social Sciences. *Studies in Philosophy and Education*, 29(2), pp.229-42.
- Swirski, T. 2003. Third Generation Creativity. Introduction: the Creative University. In Michael A.Petera & Tina Besley. *The Creative University*, Rotterdam: Sense Publishes, pp. 145-60.
- Towell, E., McFadden, K.L., McCoy, W.C., and Buhrow, A., 2012. Creating an Interdisciplinary Business Ethics Program. *Journal of Academic Ethic*, 10, pp. 93-112.
- Tuana, N. 2013. Embedding philosophers in the practices of science: bringing humanities to the sciences. *Synthese*, 190, pp. 1955–73.