

Education integrity survey: A suggested measurement of integrity in education sector

Zulfadhli Nasution^{1,a*}, Sari Angraeni^{1,b}, Aida Zulaiha^{1,c}, Hani Mairina Matan^{1,d},
Pipin Purbowati^{1,e}, Siti Patimah^{1,f}, Grady Nagara^{2,g}

¹ Direktorat Jejaring Pendidikan, Komisi Pemberantasan Korupsi. Gedung Pusat Edukasi Antikorupsi. Jl. H. R. Rasuna Said Kav. C-1, Setiabudi, Jakarta, 12920, Indonesia

² Researcher of Next Policy. Ruko Graha Depok Mas Blok A No. 17-18 Lt. 2, Pancoran Mas, Depok City, West Java 16431, Indonesia

^a zulfadhli.nasution@kpk.go.id; ^b sari.angraeni@kpk.go.id; ^c aida.zulaiha@kpk.go.id;

^d hani.matan@kpk.go.id; ^e pipin.purbowati@kpk.go.id; ^f siti.patimah@kpk.go.id; ^g gradynagara@gmail.com

* Corresponding Author

Abstract: Integrity as a concept is usually associated with and measured by one of two separate scopes: personal or organizational. This paper argues that in educational institutions such as schools or universities, integrity measurement should not be done by separating personal and organizational concepts. In addition, integrity in education sector is often discussed just from academic perspective such as cheating, plagiarism or other wrongdoings in classroom or research activity. The measurement concept in this paper also includes non-academic aspects such as administrative services, financial management, and procurement. Educational integrity in this paper combines three concepts which are the character dimension (Istiani, 2015), the Corporate Ethical Value model (Kaptein, 2007), and the classification of corrupt behaviors in education compiled by KPK from various resources (2018). To conclude, the concept of educational integrity should be looked as holistic one which can be assessed from the integrity character of students, the ecosystem that influences them, and also the compliance level of school's governance. This offered concept tries to fulfill the strategic role in encouraging educational stakeholders to massively and systematically evaluate the achievement of integrity improvement in the education sector, including the human capital result.

Keywords: Integrity, Education, Character, Ecosystem, Governance

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Introduction

Law Number 20 of 2003 on National Education System states that national education seeks not only to develop intellectual capabilities, but it also includes comprehensive functions to foster dignified characters. It means that education is inseparable from character development in addition to intelligence development.

However, permissiveness towards dishonesty is still found in the field of education. Even though the result of 2021 Anti-Corruption Behavior Index (*Indeks Perilaku Antikorupsi*, IPAK) had increased compared to the previous year, when it comes to specific questions related to permissiveness in the education sector, there are still several important evaluations. For example, when probing attitude towards teachers/lecturers who help someone other than their family members to get a guaranteed (allotted) admission into the school/campus where they teach, the percentage of people responding with "acceptable" had increased from 26.43 percent (2020) to 27.23 percent (2021). Another interesting finding is that as much as 8.44 percent of the people considered that giving money/goods/facility to the school/campus to get their children admitted there is an acceptable conduct, which had increased compared to 2020. Both findings indicate permissiveness towards nepotism and gratification behavior (BPS, 2021).

Research by Indonesia Corruption Watch (ICW) (Sjafrina & Anggraeni P. N., 2021) identified at least 240 corruption cases in education sector had been addressed by law enforcement officials

between 2016 and September 2021 with 621 suspects involved. State losses incurred as a result of these act of corruption committed with different methods, actors, and places amounted to 1.6 trillion rupiah. Those were merely the revealed cases, while the losses that became the base of the iceberg due to corruption in education sector could be far greater.

It is therefore important to continue to improve and build integrity in education sector which should function as a place to nurture and exemplify noble character. The anti-corruption education organized by the KPK as mandated by Article 7(c) of the Law on the KPK Corruption Eradication Commission aims to support the character education of learners throughout their learning careers so that they adhere to anti-corruption behavior and support anti-corruption programs. Hopefully, in the future these attitudes and behaviors will remain ingrained by learners who continue various professions both as state administrators and other professions.

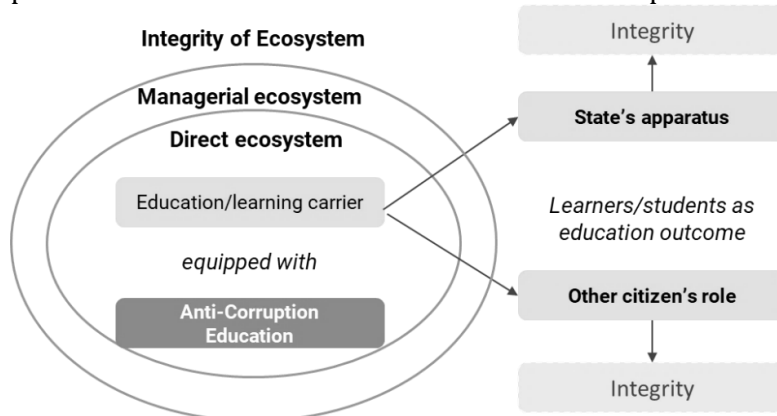


Figure 1. Illustration of Anti-Corruption Education

Intervention-based integrity of education carried out by the KPK includes: (1) Internalizing the value of integrity to learners; and (2) Creating an education ecosystem with good integrity that affects the integrity of learners both directly and indirectly, namely education management, including its interaction with various elements (networks) of education.

In order to capture and map the condition of integrity in these three domains, the Corruption Eradication Commission proposes an Education Integrity Survey as an alternative effort that seems to have never been carried out in a structured manner in Indonesia. This effort is carried out by preparing measurement indicators with the following goals: (1) capturing and mapping the condition of education integrity in three domains (individual, ecosystem, and governance) in Indonesia; (2) preparing and providing recommendations for improvement based on the obtained measurement results; and (3) evaluating the achievement of improvement in the development of integrity in education sector so that education sector as well as the human resource generated from this sector could achieve integrity improvement in the long run.

This paper aims to offer a wider scope on educational integrity and an alternative to measure it. The first part of this paper will elaborate the concept on integrity, integrity in education, and anti-corruption education strategy. It will be followed by deeper exploration on an alternative construct to measure educational integrity including its concept and operational definition. That construct can be strategically used by education stakeholders to evaluate the improvement of education integrity in order to establish improvement of human capital.

Literature Review and Conceptual Framework

Integrity

According to monolingual dictionaries (such as *Oxford Learner's Dictionaries* and *Cambridge Dictionary*), integrity has two principal meanings, (1) the one related to the quality of honesty and having strong moral principles, and (2) the one related to a whole, complete, inseparable state. Likewise, *Kamus Besar Bahasa Indonesia* captures the two meanings, defining integrity as “*quality, nature, or condition that shows a complete unity so that it has the potential and ability to radiate authority; honesty.*”

However, the meaning of integrity also has various ranges and contexts, both in terms of the substance of the definition and domain, which also affect the method of measurement. The frequently associated meaning of integrity is related to an individual's behavior with incorporation of certain values such as honesty, fairness, responsibility, etc. Conversely, the image of an individual without integrity is usually associated with some behavior such as dishonesty, corruption, cheating, violence in the name of religion, apathy, time theft, disobedience to regulations.

Huberts (2014, 2018) stated that there are at least eight notions of integrity starting from wholeness and coherence; professional responsibility; moral reflection; uncorrupted values; laws and regulations; moral values and norms; and exemplary attitude. This interpretation of integrity focuses more on the behaviors of participants in an organization, especially in making and implementing decisions.

However, in a broader scope, integrity is also defined and measured at the organizational level (although sometimes it is still assessed in an aggregated way from the individuals' behavior). Therefore, Duggar (2009) explained that integrity can also be reviewed both individually and as a corporate culture. Individually, integrity is an integral part of an individual's character, including consistent behavior of being considerate, compassionate, transparent, honest, and ethical. Meanwhile, within an organizational domain, integrity is associated with culture, policy and leadership philosophy. A culture of integrity should be initiated from the highest level and reflected in the behavior and activities of its officials.

Integrity in this domain was also discussed by Dunn (2009). Integrity is defined as something related to a set of moral values, provided that the moral values are consistent with a set of social values. However, this notion also emphasizes that integrity is attached to an individual moral agent. Dunn (2009) elaborated that organizational integrity can be conceptualized as the alignment of organizational values and social values, or organizational behavior and social values.

Based on the varied explanations above, integrity is closely related to moral principles that can be realized both as individual and organizational character. In organizational context, integrity is also a manifestation of the notion of a condition that is whole, complete, inseparable in carrying out those moral principles and honesty.

Building Integrity through Anti-Corruption Education

Referring to the 2005–2025 National Long-Term Development Plan (RPJPN) prepared by the National Development Planning Agency (Bappenas), the vision of the national corruption eradication effort is to actualize a nation capable of taking anti-corruption attitude supported with integrity-based systems and cultural values. Bappenas mentioned six key points to actualize this vision. The first to fifth include coordination, corruption prevention and prosecution programs that should be carried out comprehensively. Meanwhile the sixth is anti-corruption education as an effort to foster anti-corruption culture within society.

The presence of the Corruption Eradication Commission (KPK), which is a product of Law Number 19 of 2019 on the second amendment to Law Number 30 of 2002, is one of several manifestations of national anti-corruption effort. The KPK itself implements some corruption eradication strategies including prosecution, prevention, and education. Prosecution is the KPK's repressive strategy to bring corruption perpetrators to the court. The prevention strategy is an attempt to minimize the potential circumstances of corruptions to take place. Education is an effort to build public awareness of the importance of anti-corruption behavior and more importantly the development of integrity culture within society. These three strategies would be worked out by optimizing society participation.

Anti-corruption education (hereinafter referred to as PAK) plays an important role as one of several keys to eradicate corruption in Indonesia. In corruption eradication orchestration from upstream to downstream, PAK occupies the most fundamental position because it is the input for the emergence of national cadres with integrity in the future. Those nation's cadres with integrity will later become leaders in their respective sectors and areas of expertise (both in governmental and non-governmental ones).

A plenary strategy is needed to shape the culture and character of avoiding corruption among citizens. Two strategies are going to become a reference in PAK implementation within society. The

strategy includes two models of intervention. The first one internalize values to learners at every level of education. The second one is creating the integrity of the education ecosystem. The first strategy focuses on interventions to learners at every level of education, while the second strategy focuses on interventions to education ecosystem landscape which includes institutional/organizational management and the integrity of managers such as teachers and education staff.

The first strategy, internalization of values to learners. This strategy builds a culture of 'avoiding corruption' which means developing an integrity values upholding character among citizens. The process of building those characters needs to refer to various relevant theories as the basis for PAK strategy in small scale. The theoretical basis includes the derivatives of the values of integrity, types of encouragement for individuals to be able to uphold integrity, and the impact of PAK on the development of integrity attitude in individuals. In addition, the theory of the stages of moral development is also very important to allow more accurately-targeted value internalization strategy, in the sense that the PAK process is implemented effectively according to age level of the learners.

The results of Istiani (2015) study showed that integrity is built through three primary dimensions: motivational trait, personal agency, and moral courage. Motivational trait refers to the basic desire that guides individuals to achieve the ultimate goal in the form of values reflected in actions and behavior. This dimension becomes the foundation that directs individuals to moral behavior. In this context, the values adhered to determine what kind of motivation a person has. Meanwhile, the personal agency dimension is situational, in the sense that there is a process of negotiation between the individual (self) and social setting (ecosystem). In other words, personal agency is the individual's capacity to realize that desire (motivation) in the midst of society. The moral courage dimension is defined as the individual's courage to side with the truth for something known and believed.

Istiani (2015) described the three dimensions as mutually continual. First of all, motivational trait is the most fundamental dimension, followed by personal agency as a process (individual's attempt to realize their motivation) and moral courage as an individual decision/action whether to side with the embraced values or not. Each dimension has sub-dimensions which then comprise a unified value of integrity as shown in Table 1.

Table 1. Dimensional component of integrity

| Foundation | Process | Decision | Result |
|--|---|--|----------------------------------|
| motivational trait: 1. idealism (honesty, justice, empathy, altruism, respect) 2. Acceptance (self-confidence) 3. Independence 4. Honor (respect) 5. Order (discipline) 6. Curiosity (initiative) 7. Power (leadership) | Personal agency: 1. Self examination (self-reflection) 2. Forethought (anticipation) 3. Intentionality (well-planned) 4. Self regulator | Moral courage: 1. Fear (managing fear to do the right thing) 2. Moral choice (able to decide in favor of moral truth in a dilemma) 3. Identification of moral situation (ability to identify moral choices) 4. Individuality (managing cultural biases in the environment) | Integrity in action and behavior |

The second strategy is establishment of education ecosystem integrity. This strategy try to create a favorable environment so that the agents within it are able to practice integrity behavior. The implementation of the second strategy is important because the environment also contributes to an individual's moral choice. It is particularly true when an individual come to their teenage years, when they will evaluate what other people are doing. The lower the value of integrity in an educational institution, the greater the pressure that encourages learners to act against the value of integrity. For example, when teachers act "immorally", especially if it occurs continuously, the behavior will be considered normal by learners over time. Therefore, character building and integrity ecosystem development should go hand in hand.

This strategy is built upon four concepts: the social ecological model, corporate ethical virtues, normalization of corruption, and education management by the KPK.

The social ecological model. In response to the challenge of building an education integrity ecosystem, the social ecological model is a very relevant theoretical foundation. This model is basically offered for the benefit of health promotion, first developed by McLeroy et al. (1988). The basic premise of the social ecological model is that an individual's action is based on the availability of choices as a result of his/her interaction with the social setting he/she belongs to. This model imagines that an individual's behavior can be determined by ecosystem layering up to the very top, namely the government (policy makers).

In the practice of integrity, an individual's choice to act in harmony with moral values or vice versa is also influenced by such layering. Sitting in the first stratum after the individual is interpersonal relationship such as family, friends, and neighbors that influence the individual's moral choice. Family as the first institution any human being belongs to, becomes an important determinant when instilling value of integrity. However, in many cases, family contradictorily exemplifies behavior that goes against the value of integrity instead. To cite a simplest example, parents do not instill knowledge about the separation between one's own property and other person's.

However, this problem is not necessarily because the family has no integrity. Taking a closer look revealed that the parents do not have sufficient knowledge about the value of integrity which turned out to be so due to their inability to access education. Sociologically, grouping occurs based on similarity in social status (for example, households with relatively low education will have neighbors with similar household characteristics). On a higher scale of social organization, knowledge of the value of integrity is also inadequate.

Then, an important question arises: why do some families have difficulty accessing adequate education? One possible answer is inequality rooted in non-inclusive development policies. From here, we finally realize that the policy on just and equitable education turned out to be highly influential in making choices down to the smallest scale, namely individuals. This is of course merely an illustration on how the social ecological model works. The ongoing problems at each layer are so complex in reality. As if in onions, the social ecological model is described as a layered interaction between an individual and the setting he/she belongs to up to the largest scale, namely government policy. Figure 2 visualizes the concept.

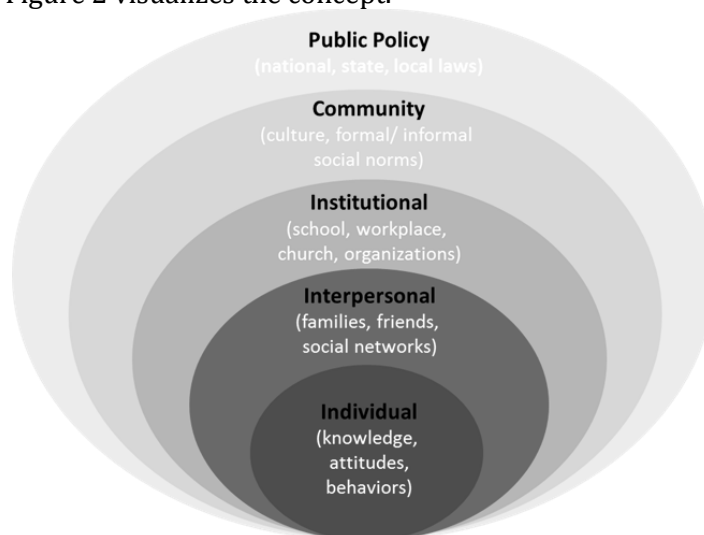


Figure 2. Social ecological model (Perez, 2017, p. 31)

Based on the social ecological model, interventions should be carried out at every level from individual, interpersonal, institutional, community, to public policy. In turn, anti-corruption effort should also consider layered interventions. That reason encourages the Corruption Eradication Commission, in a comprehensive step in eradicating corruption, to take preventive actions as well by encouraging reforms/changes up to the largest scale, namely public/government policies.

Several actors are interrelated in establishing an education ecosystem. The actors reflect the top layer to the bottom. In the top layer, the involved actors are policy and planning makers, including the Ministry of Education, Culture, Research, and Technology (Kemdikbudristek), Ministry of Religious Affairs (Kemenag), and the KPK. Actors in the next layer is the local government, especially the education office. In respect with the higher education, the actor in the next layer is the university, including their leaders such as the rector and university boards. The next layer is the primary executive of education, namely schools (teachers and education staff), including school committee and professional organizations. At the university level, it includes the lecturers, educational staff, alumni, and general public assuming supervisory role over the implementation of higher education. Meanwhile, the lowest layer is occupied by the learners as the subject of the learning process of which the upper layers are so influential in the quality of the received learning.

The Corporate Ethical Virtues (CEV) Model

Corporate ethical virtues (CEV) is an ethical culture model expected to stimulate the implementation of a code of conduct for all members in the organization. This model was developed by Muel Kaptein in 1998 and then tested empirically eight years later and published in the *Journal of Organizational Behavior* volume 29 of 2007. There are seven virtues which, according to Kaptein (2008), are very important to comprise an ethical culture of an organization, including educational institution, in order to realize the values of integrity.

First, Clarity; an organization should clarify what the expected ethical behavior is. These expectations must be concrete, comprehensive, and easy to understand. Several previous studies have shown that an overly generalized code of conduct is not enough for individuals to distinguish between ethical and unethical behavior. For example, an organization encourages its members to always “do good”. “Do good” becomes ambiguous because there are practically multiple interpretations about what those good deeds are. It is also true in many organizations, including educational institutions.

Second, Congruency; an organization's code of conduct should be promoted through exemplary behavior. In educational settings, the values of integrity are unenforceable if its leaders, educators, and employees do not practice the values of integrity themselves. This is particularly due to the learners looking to their teachers/instructors and the people around them as moral reference.

Third, Feasibility; the applicability of the enacted code of conduct by the members of an educational institution such as teachers and learners. Kaptein gave an example of how the ethic of being “responsible” for assigned tasks should come with the organization's availability to provide sufficient time, equipment, budget, and information. In school settings, the responsibility value is usually applied to learners by giving homework. Learners will be able to do it if the school provides sufficient time and takes account of the student's workload. When students become overburdened, referring to what Kaptein said, they will find it difficult to fulfill the responsibilities assigned by their schoolteachers.

Fourth, Supportability; is an incentive to motivate members of an organization to behave in accordance with the code of conduct. Previous studies have shown that undermotivated individuals tend to act unethically and would in turn damage organizational values. This support is there so that individuals have some trust and respect for institutions and authorities, including in educational settings. Examples of support are showing appreciation to learners who have demonstrated ethic-conforming behavior, so that they are increasingly motivated, while those who yet to catch up will also be encouraged to behave ethically.

Fifth, Transparency; is an individual's knowledge of the consequences of certain action or deed. The consequence is not a punishment for the action, but the upcoming repercussion if the action is carried out. Thus, educational institutions should provide the knowledge, especially to the learners, regarding the short-term and long-term repercussion of various actions that deviate from the value of integrity. Knowledge of the repercussion is related to specific actions. For example, what are the negative repercussion of dishonest behavior? Who is going to be harmed?

Sixth, Discussability; the existence of discussion channels between all members of the organization regarding the code of conduct is very important. The existence of discussion/communication channels in educational institutions not only opens up space to solve common problems,

but also becomes an effective way to promote learners' awareness of the importance of integrity. For learners beginning their secondary education level, being able to have a discussion with their teachers becomes essential because a child at this age begins to question values and authority.

Seventh, Sanctionability; no enforcement of ethics would be effective without decisive punishment. This punishment must be enforced fairly (not selectively) and consistently. A fairly and consistently imposed punishment diminishes tolerance towards unethical behavior by the learners. At the same time, this punishment comes with fairly- and consistently-awarded appreciation/acknowledgment. This element of punishment and reward is basically related to the aspect of support discussed previously. This is due to the fact that fair punishment and reward encourages learners' trust in education authority. High level of trust goes hand in hand with higher student motivation to act with integrity.

Normalization of Corruption in Organizations

Here, the term "normalization" is used to describe when corruption in an organization is perceived as normal occurrence. It means that corrupt practices have been embedded in organization structure and process, internalized as common and even desirable practice by the perpetrators, and passed on to the next generation of members (Ashforth & Anand, 2003). According to Ashforth and Anand (2003), such normalization might occur owing to three elements: institutionalization, rationalization, and promotion.

Institutionalization

Institutionalization is defined as a process to turn a behavior into a stable, repetitive, and maintained activity by some people without questioning its appropriateness. In this context, institutionalized corruption means that the immoral act has been a common conduct and tolerated by fellow members.

According to Ashforth and Anand (2003), institutionalization process goes through three phases, the first of which is the decision to engage in corrupt behavior. In this phase, an organization does not take any action towards corruption incident committed by its members. This permissive attitude becomes the starting point for the subsequent act of corruption. According to Ashforth and Anand (2003), the key factor to this phase is leadership. Leaders who act decisively and disapprovingly against corrupt behavior will suppress the likelihood of corruption in the future. Conversely, when a leader is permissive or tolerate towards corrupt practices (or even participate in it), a "fertile ground" for the emergence of more pervasive corruption will be established. In educational institutions, the leadership role, from principal to teachers, becomes the key factor whether corruption will be hindered or allowed to thrive instead.

The second phase takes place when corruption slowly permeates the structure and process in an organization. In this phase, there is something referred to as organizational memory to describe the process of acquiring, storing, and using knowledge about corrupt practices in organizational activities. This "memory" will spread to all members of the organization as an insight that corruption is a "permissible" thing to do. It is also during this phase that the corrupt practices begin to be institutionalized because it is increasingly practiced. Fellow actors will protect each other, while those who are not involved tend to ignore (allow) or discouraged to oppose.

The final phase of institutionalization takes place when corruption becomes a routine. Corruption is routinely carried out in four ways. First, removing the notion that corruption is a crime and harms many people. Second, faking act of corruption as a job function of every member so that they do not realize the corrupt nature of their action. Third, incorporating act of corruption into a system so that corruption pervades the organization members' activities. Fourth, diverting focus to the act of corruption (as part of the job) without paying attention to the negative effects.

Rationalization

It is common for the perpetrators to offer a plethora of excuses (rationalizations) to cover up their malicious acts or even to build an opinion that what they do is a good thing. Rationalizing corruption in an organization occurs when the immoral act is considered as a right or good thing to do. There is a moral inversion because what should be a bad thing is considered to be good. For

example, during the final examination in schools. We all know that cheating in a test is a disgraceful act. However, under the pretext of “helping” fellow friends and “solidarity”, cheating could be rationalized as a right action because it is for the common good. In fact, in some cases, principals and teachers also justified this action so that 100 percent of learners passed the test in order to save the school’s reputation. Rationalization is also related to eliminating negative interpretation by promoting opinion that the committed act of corruption is an “exception” and morally justifiable.

Promotion

The promotion process plays an important role in instilling a corrupt culture, especially to newcomers. Promotion will shape values, beliefs, norms, and skills so that members fulfill their roles effectively, including the act of corruption, in the organization. Those newcomers may come from an environment that is more intolerant of corruption, but then they become more tolerant after joining the organization.

Ashforth and Anand (2003) noted that there are at least three stages of promotion. The first stage is co-optation. Members are induced with new values with the intention of keeping the existing culture of corruption, such as by providing rewards to alter perception and attitude towards the act of corruption. This process is carried out regularly to create a new moral attitude that is more tolerant of corruption practices.

The second stage is incrementalism. Members are slowly involved in the act of corruption, even in the lowest level. This is done to acquaint new members with it and let them think that the perpetrated action is in fact “okay”. As they get used to it, the members in concern rationalizes their action by assuming that the essentially corrupt behavior turns out to be not as bad as presumed.

The third stage is compromising. At this stage, the members' morality is broken since they have become part of a chain of corrupt practices that are considered normal. In fact, they even have their own motives to commit corruption without the need for incentives/encouragement from other parties.

Management of Integrity Education

If corruption can be normalized, so can the opposite, namely anti-corruption and the value of integrity, which can also become the culture and the norm (de-normalization of corruption) in educational institutions. Apart from the effort to build character of integrity in learners, creating an integrity ecosystem is also very important. Bronfenbrenner (Paquette & Ryan, 2001) explained that a person’s development cannot be separated from the dynamic relationship of the individual with their environment, starting from the smallest environment that the individual interacts with directly (microsystem); the environment that forms the micro-system structure (mesosystem); the larger social system (exosystem); cultural values, laws, and customs (macrosystem), to the time dimension of important points of the individual’s life (chronosystem).

Management of integrity education is an approach model to encourage the establishment of education ecosystem integrity based on the elements of accountability, transparency, and participation. With good management, the likelihood of criminal acts to occur in schools will be further reduced. Rules will be enforced fairly while a favorable environment is created to support internalization process of integrity value to learners.

Management of education can be broken down to the academic and non-academic side. It means that the practice of integrity in education sector should include both of these things. The academic side includes student admissions, learning, research/community service, to graduation. Meanwhile, the non-academic side includes educational administration, financial management/transparency, selection of campus/school leaders, HR management, procurement of goods & services, accreditation and licensing, to supervision.

Looking at the 2021 corruption perception index (CPI) data from Transparency International (2021): Denmark, Finland and New Zealand ranked first as the countries with relatively free from corruption with a CPI score up to 88. Looking closer to what the three countries have done in their effort to eradicate corruption, we will find out that among the keys to successful establishment of an integrity ecosystem is the aspect of good management. Even though the management in concern is broad in nature, it can be used as good practice in education sector.

Transparency, accountability, and public participation are the “three mantras” of a management that has been proven to suppress corruption to a very minimal level as in the experience of the three countries above. Down to the practical level, the implementation in the field is indeed varied. In New Zealand, public participation is encouraged by involving civil society as the implementer of government policies. For example, social assistance is no longer provided directly by the government, but rather in collaboration with the private sector or civil society. In this case, the government only draft policies and supervises their implementation.

A management principle based on professionalism of public management and good governance becomes very important to develop education ecosystem integrity. In a document entitled Education Sector Corruption published by the U4 Anti-Corruption Resource Center (Kirya, 2019b), anti-corruption intervention in managerial context can be divided into transparency-promoting and accountability-promoting intervention. Some anti-corruption strategies below are derived from each intervention and applicable for education sector management in Indonesia (adopted from Kirya (2019a).

Logical Framework for Anti-Corruption Education

As shown in the previous section, the first strategy (internalization of values to learners) and the second strategy (creation of education ecosystem integrity) are two inseparable aspects. The quality of the internalization process through learning at every education level is greatly influenced by the established ecosystem. On the other hand, an integrity ecosystem is also established by integrity individuals. It is not only limited to the learners, but also every other actor within it.

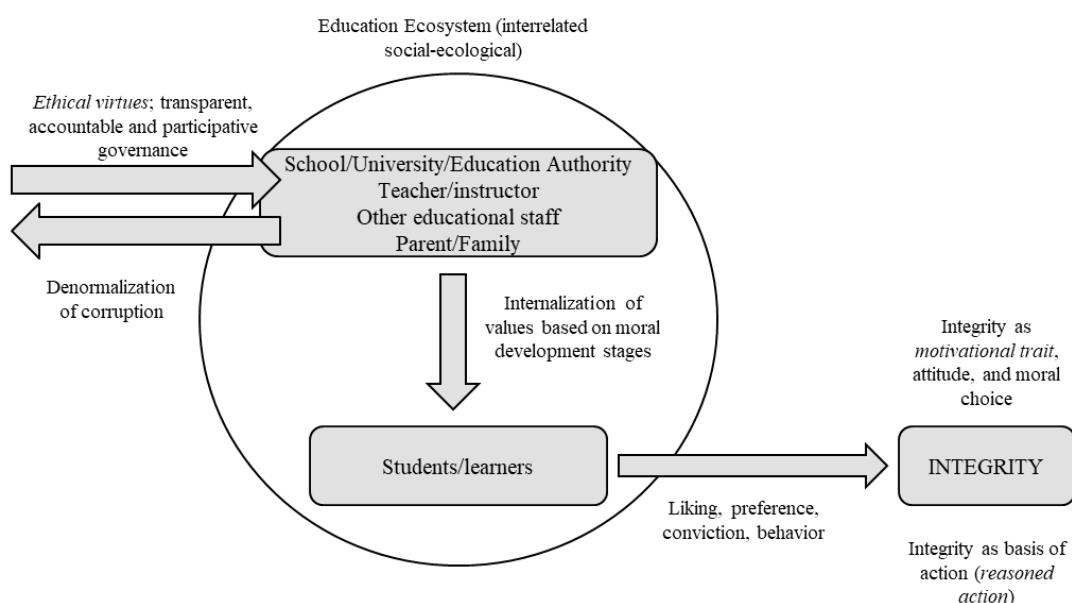


Figure 3. Logical framework of anti-corruption education

First, it is necessary to presume that ecosystems and individuals are fundamentally interrelated (social ecological models). To support the value internalization process, the implementation of ethical virtues model and transparent-accountable-participatory management is the key to create an ecosystem with integrity. Integrity ecosystem would be established when anti-corruption attitude becomes something that is considered mainstream. Later, after integrity values become a mainstream in the education ecosystem, it will work together with the de-normalization process of corruption. De-normalization can be considered successful when the actors in an ecosystem perceive corruption as an improper, unethical, even dishonorable act. It goes up to the point where even the slightest corruption is considered significant.

Ecosystem integrity means that the main actors (teaching staff/educators; education staff; public servants in education sector) providing the education are also people of integrity themselves. This is the main driver that increases not only access but also the quality of learning in

education settings. It means that internalization of integrity values to learners will also be more effective.

The process of internalizing the value of integrity itself pays attention to the character at every level of education based on the stages of moral development. With a continuous process, integrity is expected to become a primary value for every learner to embrace when contributing to society in any field. However, this process will not happen instantly: there are stages where learners start to prefer, refer, believe, and then receive it as their fundamental attitude. On one hand, integrity is a basic value that drives every individual's action. Regardless of the condition in hand, individuals with integrity possess moral courage. While on the other hand, integrity also becomes something rationalized in many kinds of action (reasoned action).

Measuring Education Integrity

Integrity in Education (Sector): Between Individual and Organizational Domain

Using broader interpretation of integrity other than moral values, Nilsen (2005) mentioned that the concept of integrity in personal, activity, and institutional domain is highly integrated to the wholeness and completeness. Integrity fostering process requires building awareness of wholeness and completeness as well as creating a supportive setting to it. In terms of education, Nilsen (2005) argued that the most important aspect of fostering wholeness in education process is a respect towards learners, and among other ways to do so is to arrange learning and teaching as a mutual (common) task or as a unity.

Astore (2009) revealed that integrity is an ethic that should be instilled into and across academicians; both teachers and learners. On the other hand, an education climate with a thick atmosphere of “us against them” between educators, educational staff, and learners hinders the required culture in universities and schools (Piascik & Brazeau, 2010). Those statements serve to support the argument that education is supposed to be whole in nature as it practically involves many interactions, at least,—the first and foremost—teaching and learning.

The second argument is that individual behavior in education sector is closely related to the ecosystem that affects it, such as to values that are taught during learning process and managerial matters, such as accountability or transparency that is experienced by people in universities or schools. It is therefore unfair to assess integrity from only one element, let alone only the learners.

Barnard et al. (2008) mentioned that individuals of great integrity are affected by a moral compass bearing values and principles that such individuals uphold. Among many factors affecting integrity, according to their research, is how context of integrity being developed that involves education process (in school) and the culture an individual experiences. In addition, as mentioned by Huberts (2018), integrity does not only involve ethical behavior from the institutional component. Instead, it should encompass all aspects of management, including ethical policies and their impacts or consequences to the community.

Bearing both arguments in mind, in education units (university/school), the definition and measurement of integrity shall not be carried out by separating the concepts of individuals and organizations. In other words, a combination or composite of both individual behavior and organizational ecosystem condition is necessary.

Earlier research used to involve certain aspect separately from any other existing actors or elements. Global Corruption Barometer (GCB) measurement conducted by Transparency International, for instance, focuses on bribery and personal connection. In 2020, GCB revealed that bribery level in education sector (public schools) in Indonesia was the third highest in Asia Pacific, along with India (22%), and the leveraging of personal connection in public schools in Indonesia was the highest in this region (32%).

Measurement of aspects in education management was once performed via Indonesia Local Education Governance Index (ILEGI) in 2010 (BEC-TF Secretariat, 2010). However, the measurement only captured education at elementary levels (primary schools [SD/MI] and secondary schools [SMP/MTs]) in some regions, and the program saw no follow up. ILEGI measured management indicators composed of: (1) transparency and accountability; (2) standardization of education services; (3) management control system; (4) management information system; and (5)

efficiency of human resource utilization. Regions involved in the measurement were later given report cards to help them monitor those indicators.

For universities, Widyaningsih (2020) put forward a conceptual design of good university governance with all its stages and indicators. Nonetheless, the measurement and evaluation concept was not developed any further. Earlier, Coalition for Clean Universities Romanian Academic Society measured some criteria such as administrative transparency and fairness, academic fairness, management quality, and financial management practice (Societatea Academica din Romania, 2008).

Another tool and method to measure integrity of education units is Intes (Integrity of Education Systems from Organization for Economic Co-operation and Development (2018) that is carried out qualitatively. This method serves the purpose of an in-depth study indeed, but cannot be applied against education units in a generalized and extensive way.

The Proposed Construct

In reference to the aforementioned elaborations, this article offers a construct of education integrity as a unity between realization of learners' character development and education ecosystem that conforms with the values of integrity, as well as the implementation of compliance (or the absence of corrupt practices) in its management. This construct is assessed and tested to be applicable at any education level, either elementary, secondary, or higher level, owing to its general and fundamental nature.

$$\text{education integrity} = \text{learners' character} + \text{ecosystem with integrity} + \text{management compliance}$$

Relationship among the variables is detailed as follows:

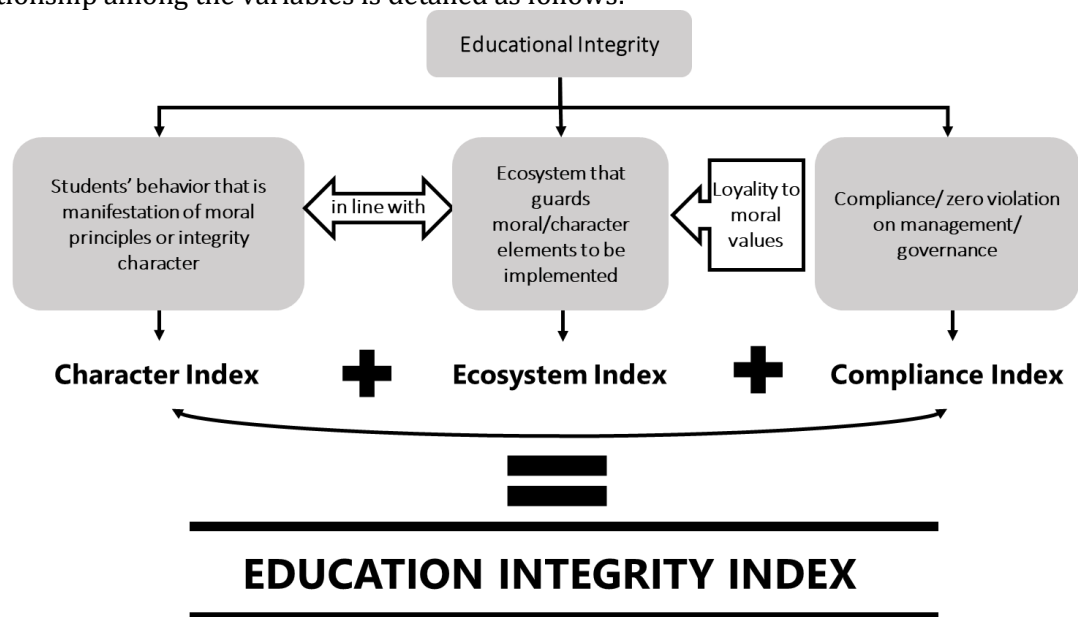


Figure 4. Construct of Education Integrity

Next, for the operational purpose of this KPK intervention program, this article also uses another construct that is available to elaborate values or indicators of integrity for every domain as given below.

Behavior with Integrity (outcome) among learners

Using a theoretical construct from Istiani (2015) who conducted her research in the context of Indonesia, integrity is a multi-dimensional concept that stems from several dimensions depicting how individuals live their lives in meaningful ways according to their personal and social orientation (Figure 2). Such dimensions include: **First**, Motivational trait as life orientation of an

individual. This can also be interpreted as the desire or basic values of an individual. It has three sub-dimensions with strongest factors: idealism, acceptance, and independence. Idealism is closely related to social justice (tolerate injustice or level of tolerance against injustice/wrong situations), fairness, respect, empathy. Acceptance is closely related to self-esteem and self-confidence. Independence is closely related to being self-dependent. There are also four other sub-dimensions that do not come out quite strong in the result of factor analysis, but are still going to be put into test, namely order, honor, curiosity, and power.

Second, Personal agency as an intellectual strength of which the strongest sub-dimension is self-examination. This dimension is related to critical thinking, including browsing for information, information analysis and evaluation, and also ethical reflection in decision making. There are three other sub-dimensions that do not come out quite strong in the result of factor analysis, but are still going to be put into test, namely intentionality, forethought, and self-regulator.

Third, Moral courage as the strength of an individual's will explains an individual's capability to make a decision even in a dilemma. The strongest factor of this dimension is fear. There are other three sub-dimensions that do not come out quite strong in the result of factor analysis, but are still going to be put into test, namely identification of moral situation, moral choice, and individuality.

Table 2. Dimensions and Indicators of an Individual's Integrity Character

| Dimension | Indicator |
|------------------------|--|
| 1. Motivational Traits | Acceptance Curiosity Honor Idealism Independence Order Power |
| 2. Personal Agency | Intentionality Forethought Self-reactiveness Self-examination |
| 3. Moral courage | Identification of moral situation Moral choice Individuality Fear |

Source: Istiani (2015)

Table 3. Dimension and Indicators of CEV

| Dimension | Indicator |
|----------------|---|
| Ethical Values | Clarity Congruency Feasibility Supportability Punishability Discussability |

Source: Kaptein (2008)

Integrity ecosystem directly related to learners' integrity

Another theoretical framework that makes up this index is the CEV (the Corporate Ethical Values) model from Kaptein (2008) (Figure 3). Even though it was conducted in corporate context, the basic variables are principle in nature that this research is still relevant in the context of public service, particularly the education sector. Some variables are very relevant with the context of instilling integrity behavior, such as leading by example, that is always featured in discussions among experts and practitioners. Variables used to measure education integrity include: (1) Clarity—to assess if an institution has provided clarification about the expected ethical behavior; (2) Congruency—to measure the extent of leading by example the Leaders have made in relation

to ethics; (3) Feasibility—to measure the probability of employees capability to behave ethically; (4) Supportability—to measure the extent of trust and respect an individual receives in his/her environment, and the extent an individual identifies and upholds values, norms, and regulations; (5) Sanctionability—to measure how an organization implement reward and punishment against proper and improper behaviors; (6) Discussability —to measure the existence of channels/forums to discuss problems and to find solutions together.

Integrity ecosystem indirectly related to learners' integrity

The relevant theoretical framework in this point is adapted from many sources available in Development of Qualitative Baseline for Higher Education Management (Penyusunan Baseline Kualitatif Tata Kelola Perguruan Tinggi) (Komisi Pemberantasan Korupsi, 2018), particularly in the section of Type Taxonomy and Corrupt Practices in Higher Education Management (Taksonomi Jenis dan Praktik Korupsi dalam Tata Kelola Perguruan Tinggi. Adaptation based on general sequence/cycle/pro-cess of education, and adjustment for elementary and secondary levels resulted in the following variables.

Table 4. Dimensions and Indicators of Management Compliance

| Dimension | Indicator |
|--------------------------------|--|
| <i>Academics</i> | <i>Student Admission</i> |
| | <i>Learning process</i> |
| | <i>Research/Community Service</i> |
| | <i>Graduation</i> |
| <i>Non-Academic/Managerial</i> | <i>Educational Administration</i> |
| | <i>Financial Management/Transparency</i> |
| | <i>Selection of Education Unit Leaders</i> |
| | <i>HR Management</i> |
| | <i>Goods & Services Procurement</i> |
| | <i>Accreditation & Licensing</i> |
| | <i>Monitoring</i> |

Source: Komisi Pemberantasan Korupsi (2018)

Table 5 that combines dimensions, sub-dimensions, and indicators comprising education integrity index.

Table 5. Indicators Comprising Education Integrity Index

| No. | Dimension | Sub-dimension | Indicator |
|-----|------------------------------|---------------------------|--|
| 1. | Learners' Character | <i>Motivational Trait</i> | <i>Acceptance</i> |
| | | | <i>Curiosity</i> |
| | | | <i>Independence</i> |
| | | | <i>Order</i> |
| | | | <i>Honor</i> |
| | | | <i>Curiosity</i> |
| | | <i>Personal Agency</i> | <i>Power</i> |
| | | | <i>Self-Examination</i> |
| | | | <i>Intentionality (well planned)</i> |
| | | | <i>Forethought</i> |
| | | | <i>Self-regulator</i> |
| | | | <i>Fear</i> |
| 2. | <i>Ecosystem</i> | <i>Ethical Values</i> | <i>Identification of moral situation</i> |
| | | | <i>Moral choice</i> |
| | | | <i>Individuality</i> |
| | | | <i>Clarity</i> |
| | | | <i>Congruency</i> |
| | | | <i>Feasibility</i> |
| 3. | <i>Management Compliance</i> | <i>Academics</i> | <i>Supportability</i> |
| | | | <i>Sanctionability</i> |
| | | | <i>Discussability</i> |
| | | | <i>Student Admission</i> |
| | | | |

| No. | Dimension | Sub-dimension | Indicator |
|-----|-----------|--------------------------------|--|
| | | <i>Non-Academic/Managerial</i> | <i>Learning process</i> <i>Research/Community Service</i> <i>Graduation</i> <i>Educational Administration</i> <i>Financial Management/Transparency</i> <i>Selection of Education Unit Leaders</i> <i>HR Management</i> <i>Goods & Services Procurement</i> <i>Accreditation & Licensing</i> <i>Monitoring</i> |

Proposed Measurement Method

For the aforementioned construct, a survey instrument in the form a questionnaire was developed by involving primary experts in psychometry. Meanwhile, sampling and statistical methods were also involving statistical experts, both from the government and independent research institution.

Education unit samples designated as the national baseline were chosen to represent island regions in Indonesia, as well as Indonesian schools abroad that amounted to no less than 500 education units and 22,500 respondents with the following scheme:

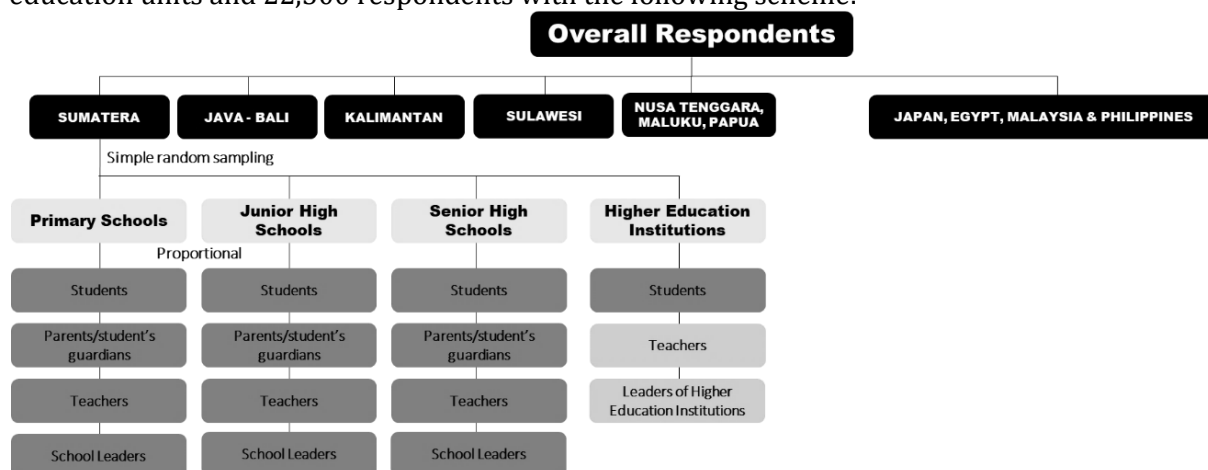


Figure 5. Sampling Scheme

In order to figure out a complete description according to the construct, respondent categories should represent proper understanding of all dimensions and indicators involved. Therefore, respondents of choice included: (1) learners made up of pupils and students; (2) parents or guardians (only for elementary and secondary levels); (3) educators made up of teachers and lecturers; and (4) education unit leaders made up of principals and rectors. For each respondent category, questions are going to be adjusted by representative indicators and difficulty level of wording.

A measurement model against more than one actor concerning ethical condition in school settings were also carried out by (Keiser & Schulte, 2007; Schulte et al., 1991, 2002). Depiction of ethical behavior at school was asked to both learners and educators. The outcome of this Education Integrity Survey is an index showing the education integrity level from a composite of constructs: dimension of learners' character, ecosystem, and management compliance. The higher the index, the more integrity a certain education sector has. Meanwhile, the intermediate output generated was a construct validity test based on the collected data according to respondent categories.

Conclusion

The anti-corruption education conducted by KPK involves two strategies, namely internalizing values to learners and building an integrity education ecosystem in a united approach. Quality of

the internalization through learning at every level of education is very much affected by whether an education unit ecosystem is favorable or otherwise. On the other hand, a favorable education ecosystem is only possible if the actors running it are of high integrity. It is not only limited to the educators, but also every other actor who contributes to the realization of such ecosystem. Managerial aspect of education sector eventually has a significant influence over the ecosystem integrity. In other words, it is the extent of which the education management has prevented corrupt behaviors/practices.

Education integrity as a holistic concept is thus not only considered partially through individual character only, or in the context of organizational management only, but rather, from a full, wholesome, inseparable perspective of realization of moral principles in individual and organizational context. Measurement of education integrity as performed by KPK was an attempt to map integrity in education sector, both in the domain of learners and the contributing education ecosystems, such as educators, leaders, as well as the management of the education sector.

In the initial stage, this construct of education integrity is being tested to 500 secondary- and higher-level education units throughout Indonesia with as many as 22,500 people targeted as the respondents. The construct test is performed on learners, educators, education unit leaders, and guardians. Results from this construct test would serve as a national baseline for future measurements of education integrity.

The existence of this measurement is expected to play strategic role in encouraging education networks to conduct an extensive and systematic evaluation of integrity improvement achievement in education sector so that education sector as well as the human resource generated from this sector could achieve integrity improvement in the long run.

The resulting index is also expected to serve as the basis and consideration to prepare some recommendations to improve and develop a better-targeted effort to implement character education and anti-corruption culture. Therefore, to cater for the need to come up with a national anti-corruption education policy, measurement of education integrity index shall be made extensively and representatively by factoring in specific condition of education units in every region nationwide.

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