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Indonesian Students’ Multicultural Awareness in Homogeneously and Heterogeneously Populated Schools and Multicultural Education Policy

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ABSTRACT

The purposes of this inquiry were to seek the multicultural awareness of students at homogeneously and heterogeneously populated schools in the Municipality of Sungai Penuh, Jambi, Indonesia. Data were collected through administering the adapted version of Multicultural Awareness Scale to 334 students from one homogeneously populated senior high school and one heterogeneously populated madrasah aliyah (Islamic senior high school). Data were analyzed by using Rasch Analysis and tests of inferential statistics. The results of data analyses indicated that 1) the students had a relatively high multicultural awareness, 2) the examination on the map of item endorsability indicated that the students had high cultural awareness but low self-awareness, 3) the students at the heterogeneously populated madrasah aliyah had a higher multicultural awareness than their counterparts at the homogeneously populated senior high school, and 4) no statistically significant differences were found in the comparisons of the students’ awareness across the demographic variables across and within the same school. Policy implications and suggestions for future research are also discussed.

Keywords: Multicultural Awareness, Indonesian Students, Multicultural Education.

Introduction

The urgency of implementing multicultural education in Indonesia has been proposed by several scholars, such as Al-Arifin (2012), Mukharis (2011), Muslimin (2012), and Tan (2006), who claim that the idea has been based on some major

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intercultural conflicts in the country in the last two decades. Thus, it seems that there is a commonly shared belief among multicultural education supporters in the country that the root of the conflict is in the degradation of the people’s multicultural awareness and competence. Hence, providing the education through curricular activities in formal education may eventually solve the problems. The literature, furthermore, proposes some foreign models of multicultural education to be adopted into Indonesian contexts of education. However, it is important to note that the models have particular historical backgrounds that are different from Indonesian contexts. Thus, they are not necessarily compatible with settings in Indonesia. For example, the multicultural education movement in the U.S. in 1960s and 1970s was influenced by cultural, social, and historical backgrounds (Banks, 2002; Bennett, 2003; Blum, 1997; Nieto & Bode, 2008) including inequalities in socio-economic and educational sectors. In addition, other works on multicultural education (e.g. Gay, 2004; Gorski & Covert, 1996; Mwonga, 2005) suggest that the idea of multicultural education has gone through some reconceptualization across time and contexts, suggesting that if Indonesia is to embark on multicultural education programs, it should first fully identify the status and features of its own indigenous multiculturalism. Therefore, careful planning and policies based on empirical research is of paramount importance. However, much of the literature on multicultural education in Indonesia is discursive in nature. The discussions of the issue are mostly theoretical and conceptual, particularly on multicultural awareness as part of multicultural education. More importantly, very few are informed by empirical research conducted in Indonesian contexts.

For multicultural awareness, as one of the essential elements of multicultural competence, it is the first foundation to identify and develop towards a holistic multicultural competence (Boutte, 1998; DuPraw&Axner, 1997; Sue, Arredondo, &McDavis, 1992). Thus, poor multicultural awareness is likely to serve as an antecedent to poor multicultural competence (Awang-Shuib, Sahari, & Ali, 2012; Osman-Gani&Rockstuhl, 2009). However, as accounts on the history of multicultural education has shown us (Blum, 1997; Gay, 2004; Gorski and Covert, 1996; Mwonga, 2005), not all phenomena of cultural conflicts are necessarily to be directly linked to the issue of multicultural awareness that multicultural education should take a considerable portion of the curriculum and be uniformly implemented across a system of education. Hence, mapping the multicultural awareness of the students is important before a multicultural instructional plan is developed.
However, the literature on multicultural education in Indonesia is still lacking such information. Also, at the global level, research related to multicultural issues is mostly conducted on teachers. Therefore, this study was meant to fill this gap by mapping the multicultural awareness of students at a homogeneously and a heterogeneously populated senior high school in Indonesia. Comparing the two contexts is hypothesized based on a frame of thought that exposure to a culturally heterogeneous environment would better improve one’s multicultural awareness than to the homogeneous one. Specifically, this study was guided by the following research questions:

1. How is the multicultural awareness of the students in the two schools?
2. Are there statistically significant differences in the students’ multicultural awareness between the two schools?
3. Are there statistically significant differences in the students’ multicultural awareness across the demographic variables of gender, previous school location, and grades?

**Methods**

**Research Site and Participants**

The respondents of this study were 334 conveniently selected students at one homogeneously populated senior high school and one heterogeneously populated madrasah aliyah (Islamic senior high school) in the Municipality of Sungai Penuh, Jambi, Indonesia. The selection of these two schools matched to the main purpose of the study, to seek the multicultural awareness of students at homogeneously and heterogeneously populated schools. The students of the homogeneously populated school were mostly from villages near the school and areas of the same sub-district that share the same sub-dialect of Kerinci, customs, and traditions. While students of the heterogeneously populated schools were from various villages and sub-districts in the Municipality of Sungai Penuh and the Regency of Kerinci, and of different sub-dialects, customs, and traditions. For the ethical consideration, the two schools’ names were kept anonymous in this report. The number of respondents from each of the schools is given in the following table:
Table 1. Respondents of the Study

<table>
<thead>
<tr>
<th>Schools</th>
<th>Number of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>The homogeneously populated</td>
<td>172</td>
</tr>
<tr>
<td>The heterogeneously populated</td>
<td>162</td>
</tr>
<tr>
<td>Total</td>
<td>334</td>
</tr>
</tbody>
</table>

Data Collection Methods

Data were collected through administering the Awang-Shuib, Sahari, and Ali’s (2012) 12-item Multicultural Awareness Scale (MAS). The items of the scale were initially adapted from the Henry’s (1995) 28-items Cultural Diversity Awareness Inventory (CDAI) and from Goode, Dunne, and Bronheim’s (2006) 25-item “values and attitude” subscale of Self-Assessment Checklist. The total number of items from the two scales was 53. As the items were originally developed for measuring multicultural awareness in western contexts and specific professional settings that were different from theirs, i.e. Malaysian contexts, Awang-Shuib, Sahari, and Ali (2012) conducted an expert judgment procedure to select items that would best suit it. The process yielded 12 items, which were furthermore re-phrased to better tap the intended research objectives. The scale measures two factors of multicultural awareness, i.e. Self-Awareness (6 items) that assesses awareness on the cultural differences from one’s perspectives, and Culture Awareness (6 items) that examines awareness on socio-cultural differences such as on family, gender, age, religion, and custom and beliefs. These items come with 5-level Likert type responses (Strongly Agree, Agree, Uncertain, Disagree, and Strongly Disagree). They reported that the results of the pilot study of the scale showed that the first factor accounted 28, 23% of the variance with an eigenvalue of 2, 82 and a Cronbach alpha reliability coefficient of 0, 78 while the second factor accounted 27, 46 % of the variance with an eigenvalue of 2, 75 and a reliability coefficient of 0, 79.

As the original version of MAS is in English, for the purpose of the study, it is translated into Indonesian with some minor wording adjustments. To evaluate its suitability with the context and the purposes of the research, expert judgment of MAS was also conducted, and the results supported the use of it in the current study. However, further evaluation of the psychometric properties of the scale in the context of the current study was also made in the first round of data analysis.
Data Analysis

The data were analyzed by using Rasch analysis and tests of inferential statistics and the analysis was conducted in two stages. In the first stage, the psychometric properties of the instruments and responses were evaluated for the validity and reliability of the study, while the second stage sought to answer the research questions. Specifically, the adoption of Rasch analysis in this study is based on the fact that it has the necessary features needed to successfully address the quantitative research. First, it facilitates the conversion of the questionnaire’s non-linear ordinal data into interval ones and measures them on a common linear logit scale (Wright, 2000). Second, the Rasch analysis is sensitive to the idiosyncrasies of persons and items. For example, it gives information about the unique values of individual thresholds among categories in each item of polytomous data (Bond & Fox, 2001). This way, a wider access will be available, is not only for better information about a person’s ability and item difficulty, but also for a more precise and comprehensive identification of the nature of the persons and items. Third, Rasch analysis allows evaluation even though respondents do not answer every item. Fourth, it also simplifies the communication of results in the form of graphical summaries of population and detailed individual profiles in a way that would be easily understood and interpreted by educators, policy makers and the concerned public (Wright, 2000). Research also shows that Rasch analysis is easy to apply in a wide variety of situations (Andrich, 1975; Connolly, Nachtman, & Pritchett, 1971; Rentz & Bashaw, 1975; Wilmott & Fowles, 1974; Woodcock, 1974).

Findings

This section is divided into two subsections. The first subsection, as mentioned in the previous section, presents the evaluation of the psychometric properties of the scale, while the second one will present the results of data analysis that answer the research questions.

The Psychometric Properties of MAS

The evaluation of the psychometric properties of a scale addresses the issue of validity and reliability of the data. As Rasch analysis necessitates validity and unidimensionality of the measurement instrument and requires responses that fit the Rasch Model for the result to be meaningful, an initial analysis that looked into
these issues was conducted on the data from the 334 respondents. Bond and Fox (2001) suggest two sets of general guidelines to help to assess the validity of a set of measure. First, by assessing the extent to which all the items work together to measure a single construct or variable. In Rasch Analysis this information is given by two indices: Item polarity that indicates the extent to which the items are working in the same in direction on the construct being examined, and item fit statistics that shows the extent to which the items are contributing in the same meaningful/useful way to the construction of the construct. Second is by examining item ordering, that is done by examining the consistency between the empirical item order and the theoretical or experimental basis for item development. Two indices were used to evaluate this. First is the item reliability index, and, second is the item separation index. The item reliability index indicates the reproducibility of item ordering, whereas item separation index shows the extent to which the items are separated to define a continuum of increasing intensity. The parts to come of this subsection will display the item polarity, the item fit statistics, the item reliability and item separation indexes, and unidimensionality of the scale.

Information on the item polarity is given by values denoted by point measure correlation (PTMEA CORR), which has a range of -1 to +1. The directionality of the items is indicated by positive values. Table 2 presents the item polarity for all the items. The table shows that all the items have positive point measure correlation values, indicating that all the items are working in the same direction on the construct being examined.

Table 2. Item Polarity

<table>
<thead>
<tr>
<th>ENTRY</th>
<th>STIM</th>
<th>IMPEX</th>
<th>COUNT</th>
<th>MEASURE</th>
<th>ERROR</th>
<th>MNSQ</th>
<th>ZSTD</th>
<th>MNSQ</th>
<th>ZSTD</th>
<th>CORR</th>
<th>ITEMS</th>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>1</td>
<td>4</td>
<td>590</td>
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<td>.06</td>
<td>.06</td>
<td>1.96</td>
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<td>1.80</td>
<td>0.49</td>
<td>-341</td>
<td>200041</td>
</tr>
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<td>1</td>
<td>1</td>
<td>425</td>
<td>334</td>
<td>.70</td>
<td>.58</td>
<td>1.98</td>
<td>-8.58</td>
<td>.90</td>
<td>-1.01</td>
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<td>200001</td>
</tr>
<tr>
<td>1</td>
<td>11</td>
<td>1399</td>
<td>334</td>
<td>.56</td>
<td>.07</td>
<td>1.22</td>
<td>2.42</td>
<td>1.20</td>
<td>2.41</td>
<td>-341</td>
<td>200001</td>
</tr>
<tr>
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<td>334</td>
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<td>.06</td>
<td>1.00</td>
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<td>7</td>
<td>1425</td>
<td>333</td>
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<td>.07</td>
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<td>1.00</td>
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</tr>
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<td>3</td>
<td>968</td>
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<td>.91</td>
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<td>1.00</td>
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<td></td>
</tr>
<tr>
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<tr>
<td>8</td>
<td>1098</td>
<td>327</td>
<td>.54</td>
<td>.05</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td></td>
</tr>
</tbody>
</table>

| MEAN | 12.59 | 332   | .00     | .001 | 1.04 | -4.11 | 1.05 | -4.01 | 1.05 | 1.05 |
| S.D. | 1.69  | .59   | .011 | .42  | 4.31 | 4.40 | 4.21 | 4.21 |


The contribution of the items to the construction of the construct is indicated by values denoted by outfit mean-squares (OMS) and infit mean-squares (IMS). Items that are productive for measurement would have an OMS and IMS of 0.5 to 1.5 (Linacre, 2006). Greater attention, however, should be paid to high values denoted by the IMS for indicating misperformance of the items upon the people whom they are targeted, hence, a greater threat to validity (Linacre, 2003a). Overall, the fit statistics (see Table 2) shows that except for item 7, all the items have an IMS that is within the range of 0.5 to 1.5. Arnadottir and Fisher (2008) suggest that misfitting items with mean-squares outside the tolerable range degrade the measurement and, thus, a serious threat to validity.

Therefore, for the rest of data analysis, item 7 was removed. Item Reliability and Item Separation Indexes provide information on the extent to which the items in the scale are separated to define a continuum of increasing intensity. Table 3 presents the summary of the information after the deletion of item 7.

### Table 3. Item Reliability and Item Separation Indexes

<table>
<thead>
<tr>
<th>RAW</th>
<th>MODEL</th>
<th>OUTFIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITEM</td>
<td>MEASURE ERROR</td>
<td>NMSQ</td>
</tr>
<tr>
<td>1222.8</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td>167.4</td>
<td>0.01</td>
<td>1.00</td>
</tr>
<tr>
<td>1425.0</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td>968.0</td>
<td>0.00</td>
<td>1.00</td>
</tr>
</tbody>
</table>

The reliability index of item difficulty estimate of .99 is almost perfect. This indicates a high probability that the similar order of items would be produced if the set of questionnaire were administered to other comparable samples. Item Separation Index of 9.44 indicates that the items can be classified into almost 3 levels of endorsability. Unidimensionality in Rasch analysis refers to the extent to which a measurement instrument measures a single attribute or dimension of the examinees at a time (Bond & Fox, 2001). This is because a measurement will be meaningful only if it is along one dimension (Guttman, 1950). However, Linacre
(2006) suggests that unidimensionality is always approximate. It is never perfect. In Rasch analysis assessment of the dimensionality of a measurement instrument is usually conducted through Principal Component Analysis (PCA). However, different from common factor analysis that seeks to construct variables, PCA in Rasch analysis is conducted on residuals and aims to explain variance (Linacre, 2006). And if the result of the PCA suggests the presence of other dimensions in the data, it is indicative, not definitive. To ensure that the presence of the misfits in the data is random and does not indicate the existence of a second dimension (or if it does, its size is not degrading the unidimensionality of the measurement), an examination of dimensionality Map through Principal Component Analysis (PCA), as detailed in the following section, was conducted.

The results (Table 4) show that the largest factor extracted from the residuals is 1.9 units (10.5%), which means that it has a strength of almost 2 items- lower than the strength of two items, the smallest amount that could be considered a "dimension" (Linacre, 2006). This indicates the absence of another dimension in the scale.

<table>
<thead>
<tr>
<th>Table 4. Standardized Residual Variance (in Eigenvalue units)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exper.</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>Total variance in observations =</td>
</tr>
<tr>
<td>Variance explained by measures =</td>
</tr>
<tr>
<td>Unexplained variance (total) =</td>
</tr>
<tr>
<td>Unexpl var explained by 1st factor =</td>
</tr>
</tbody>
</table>

The Respondents’ Multicultural Awareness

The purposes of this quantitative inquiry were to seek the multicultural awareness of students at homogeneously and heterogeneously populated schools and to determine whether there are statistically significant differences on the awareness across the demographic variables of gender, grade, and previous schooling experience. The multicultural awareness of the respondents in the two schools is mapped by Figure 1 and Figure 2.
Both figures show that, overall, the respondents in the schools had a considerably high multicultural awareness. This was indicated by the mean (M) of the respondents’ agreement with the items that are higher than the mean (M) of the items’ endorsability. Figure 1 shows that the mean of the respondents’ agreement in the homogeneously populated school is almost 1 logit above the mean.
of the items’ endorsability. Similarly, figure 2 shows that the mean of the respondents’ agreement in the heterogeneously populated school is exactly 1 logit above that of the item endorsability.

Additionally, item maps at the two research sites can be seen in the figure 3. A closer examination of item maps shows a similar trend in the item endorsability in the two schools. The items are partitioned in two clusters. One cluster is located above the mean and the other one is located below the mean. An interesting fact is that the cluster that is above the mean is dominated by the items from the Self-Awareness factor of the scale, while the lower one is dominated by items from the Culture Awareness factor of the scale. These seem to indicate that the respondents have higher culture awareness than self-awareness.

Furthermore, Figure 3 also shows that in the homogeneously populated school, item 3 (I am comfortable in settings with people who exhibit cultural values different from my own) is the least endorsable one, and item 1 (I believe my culture to be different from the others around me) is the most endorsable one. In addition, the first three of the least endorsable items in the both contexts of this study are inhibited by the same items, i.e. item 2, item 3, and item 4. Item 2 and
item 3 assess the respondents’ preference and comfort to work with and to be with people of other cultures while item 4 deals with the use of local language.

**Inferential Statistics Comparisons of the Respondents’ Multicultural Awareness**

Tests of non-parametric statistics were conducted to compare the multicultural awareness of the respondents at the two schools for statistically significant differences in general and across the demographic variables of gender, previous school location, and grades, both between schools and within the same school. This was because the data were not normally distributed. Mann-Whitney-U test indicates a significant difference in the multicultural awareness between the homogeneously and heterogeneously populated schools with Mean Rank=14, 02 and 18, 12 respectively, U=10753.500, Z=-3.614, p=.000. This indicates the respondents in the heterogeneously populated school have a higher multicultural awareness than their counterparts in the homogeneously populated school. However, comparison across the demographic variable of gender did not show any significant difference between the male (n=156) and female (n=154) respondents, U=11411.500, Z=-.763, p=.445. In addition, in this study the respondents were also categorized based on their previous school locations. Distinction was made between those with “home” (n=224) and “away” (n=76) schooling experience. This is based on a hypothesized logical basis that those who have “away” schooling experience might have more exposure to other cultures and therefore would have better multicultural awareness. Comparison of the multicultural awareness between the respondents of the two categories, however, did not indicate any significant difference, U=7682.000, Z=-1.274, p=.203.

Within the same school, comparisons for significant differences using Mann-Whitney-U test were conducted across the demographic variables of gender, grade, and previous school locations. In the homogeneously populated school, no significant differences were found across the three variables, U=2405.000, Z=-1.279, p=.201 for gender, U=2405.000, Z=-1.279, p=201 for grade, and U=1215.500, Z=-.77, p=.938 for previous school locations. Similarly, no significant differences were observed in the respondents of the heterogeneously populated school across the three variables, U=3259.500, Z=.071, p=.944 for gender, U=1690, Z=-1.829, p=.067 for grade, and U=2699.500, Z=8477.500, p=.389 for previous school locations.
Discussion

The purposes of this quantitative inquiry were to seek the multicultural awareness of students at homogeneously and heterogeneously populated schools and to determine whether there are statistically significant differences in the awareness across the demographic variables of gender, grade, and previous schooling experience through administrating the adapted version of Multicultural Awareness Scale to 334 students from one homogeneously populated senior high school and one heterogeneously populated madrasah aliyah (Islamic senior high school) in Jambi, Indonesia. The findings of the study revealed that although the multicultural awareness of the respondents at the two schools was relatively high, the observation of the endorsability map of the scale’s items indicated that they scored low on items assessing the self-awareness dimension of the scale. The findings suggested that, in other words, the respondents at the two schools had high cultural awareness but low self-awareness. In particular, the respondents showed low agreement with items that address their preference and comfort to work with and to be with people from other cultures and the use of local language. Similar phenomenon was also observed by Koyama, Plash, and Davis (2012) in their study of Cross-Cultural Multicultural Self-Awareness among K-12 in-service school teachers in the U.S. They found that more than half of the respondents felt uncomfortable to work with students who had different values from their own.

Another major finding of this study revealed the statistically significant difference in the respondents’ multicultural awareness across the two schools was that overall respondents at the heterogeneously populated school showed higher awareness than their counterpart at the homogeneously populated school. Within the scope of the study, this finding seems to confirm the frame of thought mentioned in the introductory part of this report, that exposure to a culturally heterogeneous environment would better improve one’s multicultural awareness than to a homogeneous one. The current study also identified no significant differences in the respondents’ multicultural awareness across the demographic variables of gender, school, grade, and previous school locations. These findings are in line partly with Collins (2009) who studied “Cultural Diversity Awareness of Elementary School Teachers in Georgian Classrooms”. Using the CDAI to tap the cultural diversity
awareness of the teachers, he found that the teachers scored highest in the general cultural awareness domain of the inventory. He also found no significant difference in his respondents’ cultural diversity awareness across the variables of race, gender, level of education, years teaching experience, and exposure to or experience with multicultural education training. However, as the current study is preliminary in nature and limited in scope, at this stage of study, such concordance is not to lead to any justification and conclusion regarding the partial similarity as the respondents of the current study and those of Collins’ study were different in terms of cultural, social, and economic characteristics.

However, our findings should take into account some limitations. Firstly, participants may not be representative of all Indonesian senior high students. There may be differences between the multicultural awareness of the Indonesian senior high school students who live in rural, remote, and urban places, as in Indonesia every culture and island has its own characteristics. Therefore, generalizing the findings to other Indonesian students is cautioned. Future research may include a larger sample of Indonesian senior high school students from different areas and characteristics, which may provide different findings on Indonesian students’ multicultural awareness. Secondly, in terms of data collection methods, this study was limited to the use of the adapted version of Multicultural Awareness Scale (MAS), future research could investigate the perspectives of Indonesian students’ multicultural awareness through in-depth interviews and observation. Third, the current study is preliminary in nature. Yet, regarding the findings of this study, as long as the researchers are concerned, it maps the gap between the respondents’ self-awareness and their cultural awareness that has not been drawn before in Indonesian context. Other investigators may replicate and extend our study to a larger sample of Indonesian senior high school students across diverse schools and cultures. Further research with a larger coverage is needed to map other areas that were not covered and fully explored in this study, such as the extent to which students’ ethnicity, ethnic majority and minority status are related to their multicultural awareness.
Conclusions and Multicultural Education Policy

Schools are intended to develop and provide students with understanding, values, perspectives, attitudes, knowledge, skills, and behaviors needed to participate “within their ethnic cultures, within the mainstream cultures, and within and across other ethnic cultures” (Banks, 2002, p. 40). Therefore, developing students’ cultural awareness means helping them to recognize and to be aware of the variety of ideas and practices found around the world and “some recognition of how one’s own thoughts and behaviors might be perceived by members of differing nations and ethnic groups” (Bennett, 2003, p. 305). Overall, the findings of this study, although preliminary in nature and limited in scope, contribute to fill the gap on the literature on multicultural education in Indonesia.

Also, the findings of this study shed light on our understanding of how multicultural awareness of students in a homogeneously and a heterogeneously populated schools looks like at local levels in Indonesian contexts. One of the important findings in our study is that the multicultural awareness of the respondents in the heterogeneously populated school is significantly higher than that of the respondents in the homogeneously populated school. This suggests that, to some extent, the multicultural awareness of the respondents of this study were not uniform. This evidences that policymakers, teachers, educational leaders at national, local, and school levels should take into account that uniform multicultural education programs for all contexts and settings are not recommended as multicultural issues and status might be different from one context to another, and change from time to time.

Additionally, the findings suggest that developing and designing multicultural education curriculum and programs should be research based and school-based syllabus development should be conceptualized as a collaborative action among a number of related parties. The findings of this study should become inputs for school leaders and teachers who are interested in changing their school to be more aware through multicultural education programs or policies so that they have intercultural competences that will help them to interpret intentional communications (languages), some unconscious signs, and customs or traditions that are not similar to theirs.
References


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Correlates of Parental Attention and Criminal Behaviour among Students of Borstal Institutions in Nigeria

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Abstract

The study investigated the relationship between parental attention, educational experience and criminal behaviour of students in Borstal Institutions. The purpose was to improve the quality of parent-child relationships and reduce juvenile criminality in Nigeria. The study adopted a descriptive correlation type survey. The target population consisted of 1,394 juvenile offenders who were housed at the Borstal Institutions. The sample comprised of 450 participants who were randomly selected using a balloting (hat and draw) method of simple random sampling. Two researcher-constructed instruments were used in the study, namely: a “Criminal Behaviour Questionnaire (CBQ)” and a “Parental Attention & Educational Experience Questionnaire (PAEEQ)”. Data was analysed using the Pearson Product Moment Correlation statistical method. The findings revealed that a significant relationship existed between parental attention and criminal behaviour; and between educational experience and criminal behaviour of students in Borstal Institutions. It was concluded that adequate parental love, warmth, care, attention are imperative for effective parenting and child rearing.

Keywords: Parental attention, educational experience, juvenile offenders, criminal behaviour, and Borstal Institutions

Introduction

In recent times, and the world over, there has been an outcry on the increase in the rate of misbehaviour and crime. There is a general concern on the increase in young persons’ involvement in activities that violate moral and legal norms of

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the society. The increased rate of criminal behaviour, such as theft, murder, arson, examination malpractice, kidnapping, rape and armed robbery, among youth is alarming. It can be observed, that the world is ravaged by various violent crimes and other atrocities committed by young people. Nigeria is not an exception to this ugly development among youths.

Dambazau (2011) asserted that the trend of the Almajiri system, particularly in the North and the Alaye or “Area Boys” in the South-West of Nigeria, are all indicators of a breakdown of community norms and value systems. The problem of criminal behaviour or juvenile delinquency among youth in our society is a major national concern and an important subject for academic study. This falls under the purview of Sociology of Deviance. Giddens (2001) claimed that Sociology of Deviance is interested in issues such as delinquency, crime management, community and institutionalized programmes designed for management of delinquency among others.

The focus of this study therefore is on parental attention and educational experience as correlates of criminal behaviours among students of Borstal Institutions in Nigeria. Cases of crime committed by youths are worrisome. There have been frequent terrorist attacks, particularly in the Northern part of Nigeria. Bazza (2013) reported on a terrorist group called “Boko Haram,” some of its members are young persons who have embarked on wanton destruction of lives and property. The group has also broadened its target to include bombing public places, setting fire on schools and kidnapping of students. Questions have been asked about this upsurge in youth engagement in crime. Particularly, questions have been asked about what went wrong in the process of child upbringing that may have given rise to the development of negative behaviours in the youths. Inadequacies in parental attention and possibly negative experiences in child’s educational could have had an impact on his/her upbringing. No doubt, the family is a primary unit in which children learn the values and attitudes that guide their actions throughout their lives (Siegel & Welsh, 2005). Some parents go through economic stress due to their poor educational backgrounds and the lack of well-paying jobs. These indigent families find themselves in an impoverished condition, which invariably could affect their children who are likely to be deprived of their needs.

Makinde (2004) believed that every child is entitled to be raised in a loving, safe and secure environment that will allow him/her to develop psychologically, emotionally
and socially. Some parents have almost neglected the responsibility of attending to the welfare and emotional needs of their children, which may lead to insubordination, deviant behaviour and the involvement of the juvenile in criminal acts.

Apart from parental attention, the educational experience of a child could also impact his/her behavioural formation. Educational experience is an important aspect of a child’s upbringing, as used in this study it refers to all forms of conventional academic training that children receive in a conventional school environment. It would also be perceived to mean all opportunities for educational advancement that a child is exposed to in the course of his/her upbringing. It is assumed that when training such as this is deficient, the child may acquire antisocial behaviour. As pointed out by Frederick & Roon (2000), juveniles who are not adequately educated are more likely to engage in anti-social behaviours than those that are adequately trained. An educated child is exposed to the norms of the society, which instills in him/her a high moral standard essential for the sustenance of the state. The moral and intellectual exposure derived from formal, informal and non-formal education is likely to deter the child from any behaviour that will cause the child to be seen as irresponsible. A child’s education is supposed to be the responsibility of the parents and the state. An investment in the education of a child could help prevent the child from living a life of crime and other anti-social behaviour. However, there are legal complexities in the process of determining criminal behaviours in a child.

Section 30 of the Criminal Code (schedule of the Criminal Code Act Cap C.38 Law of the Federation of Nigeria 2010) and section 50 of the Penal Code Law No.18 of 1959 provide that a child under the age of seven does not have criminal responsibility. From seven to twelve years, a child can only be found responsible if it can be proved that he/she has a capacity to know that the act or omission should not have been carried out. Above the age of twelve, the person is deemed as fully responsible for the act or omission. Though the enactment of this law is meant to protect the child in the dispensation of justice, it does not indicate that a child cannot display criminal behavior (Law of the Federation of Nigeria, 2010). Notwithstanding, juveniles who are in conflict with the law are believed to have ‘right of treatment’.

The need for social rehabilitation for young offenders accounts for the establishment of Borstal Institutions that today serve as behavioural correctional institutions for boys (minors) who violate state laws. The term Borstal means prison for young offenders between the ages of 16 and 21 (Ogundipe, 2011). Borstal Institutions around the world have dual objectives. First, they are
established to use education as an instrument of behavioural change or modification and secondly, to achieve a deviant free society (Haralambos & Holborn, 2008). Thus, rather than condemn the juvenile delinquents, they are referred through legal proceedings for treatment (Conklin, 2007).

There are three Borstal Institutions in Nigeria, located in Kaduna in Kaduna State, Abeokuta in Ogun State and Ilorin in Kwara State (Ogundipe, 2011). The main philosophy behind the establishment of Borstal Institutions is that children who are offenders can be reformed and prevented from getting involved in serious crimes if given a chance to change and not co-habit with hardened criminals. The idea is that if young offenders are housed in the same prison with adult criminals, they tend to learn more crime and become worse (Conklin, 2007). As such, students of Borstal Institutions are often exposed to a series of educational, skill acquisition and counselling programmes. They are expected to get reformed and desist from the life of crime. The effectiveness of such exposure therefore cannot be ascertained unless there is a concerted research effort to determine the relationship among socio-parental variables such as parental attention, educational experience and criminal behaviour among students of Borstal Institutions, hence this study. Towards this end, two hypotheses were generated for the study, namely:

1. There is no significant relationship between parental attention and criminal behaviour of students in Borstal Institutions.
2. There is no significant relationship between educational experience and criminal behaviour of students in Borstal Institutions.

Methodology

The descriptive research design was adopted using specifically the correlation type. According to Upadhya and Singh (2008), correlation study is concerned with studying the relationship between two or more variables for the purpose of making predictions about relationships. As far as this investigation is concerned, correlational design is used to find out the degree of relationship between parental attention patterns and educational experiences and their general influence on the criminal indulgences of students in Borstal Institutions in the country. There was no conscious manipulation of the variables since the interaction among them has been completed.

All juvenile offenders who are staying and residing in the Borstal Institutions located in Kaduna, Abeokuta and Ilorin, Nigeria, respectively constituted the target
population for the study. There were 1,394 juvenile offenders housed at the Borstal Institutions. The sample consisted of 1,044 juvenile offenders housed in Borstal Institutions in Kaduna and Abeokuta. Out of this number, 240 and 210 participants were randomly selected respectively. Thus, a total of 450 participants were randomly selected using balloting (hat and draw) method of simple random sampling for the study. Two research instruments were used in the study, namely: a “Criminal Behaviour Questionnaire (CBQ)” and a “Parental Attention & Educational Experience Questionnaire (PAEEQ)” (Fausta, 2014). The “Criminal Behaviour Questionnaire (CBQ)” is a 20-item self-developed Likert format with four grade responses ranging from Strongly Agree (SA) to Strongly Disagree (SD). Respondents were instructed to tick (Ö) the key in front of each item to indicate the extent of their agreement or disagreement with each statement. This instrument has two sections. Section “A” contained items eliciting respondents’ biographical data such as length of stay of students in Borstal Institutions, reformation tools (academic and vocational) and level of education. The section ‘B’ consisted of 20-items developed to elicit information about the intensity of respondents’ criminal behaviour. Strongly Agree (SA), Agree (A), Disagree (D), Strongly Disagree (SD).

The second research instrument, “Parental Attention & Educational Experience Questionnaire (PAEEQ)”, is a 30-item questionnaire developed to access the level of parental care and parents’ responsibilities to their children. It consists of two Parts – Parts One and Two. Part One measured the Bio-data of the respondents including Borstal Institution, level of education, types of reformation tools, and length of stay. Part Two consisted of two Sections A and B. Section A of this questionnaire consisted of 20 items which measured educational experience, such as the pattern of their access to educational programmes, facilities and guidance as may be presented formally or informally in and out of school environment. Further, Section B consisted of 10-items which measured the pattern of respondents’ access to educational programmes, facilities and guidance as may be presented formally or informally in and out of the school environment. The purpose of the instrument was to assess information on respondents’ experience on attention received from their parents or guardians. The responses to these items were also ranked on a four-point scale.

Content validity of the two instruments was achieved through submitting items to Measurement and Evaluation, and Sociology of Education experts for vetting and approval. The modifications and suggestions from these experts led to the refinement
of the instruments. Thereafter, a pilot study was done to establish how reliable the instruments are. This involved the double administration (with a two-week interval) of the instruments on thirty (30) participants, who were randomly selected from Ilorin Borstal Institution, as one of the Borstal Institutions not involved in the main study. Ilorin Borstal Institution in Kwara State was used for the pilot study because of the State’s strategic location as a gateway between the Northern and the Southern parts of Nigeria. A Pearson Product Moment Correlation statistical method was used for data analysis, yielding a test-retest reliability coefficient of 0.80 and 0.78 for the instruments, indicating a high internal consistency.

Consequently, the instruments were accepted as being stable over time hence their usage in this study. The hard copies of the questionnaires were administered on the respondents by the researcher with the assistance of the research assistants who were recruited for the purpose of this study. They are prison officials, social workers and community health officers, employed by the government in each of the Borstal institutions. Each has spent 5 years as a prison official. However for the purpose of this study, they were trained at their different locations on the purpose and logistics of this study. Also, adequate time was provided for respondents to respond to all the items. By this method, the 450 questionnaires administered were returned correctly filled and used for analysis. The data obtained for this study to test the hypotheses were analysed with the use of the Pearson product moment correlation statistical method using the updated SPSS version 17.0. All hypotheses were tested at 0.05 level of significance.

**Results**

**Hypothesis one:** There is no significant relationship between parental attention and criminal behaviour of students in Borstal Institutions. The hypothesis was tested using Pearson Product Moment Correlation. The results of the analysis are presented in Table 1.

*Table 1: Relationship between Parental Attention and Criminal Behaviour of Students*

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>Std. dev</th>
<th>r-cal</th>
<th>r-tab</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parental Attention</td>
<td>28.77</td>
<td>6.88</td>
<td></td>
<td></td>
<td>Significant</td>
</tr>
<tr>
<td>Criminal Behaviour</td>
<td>31.08</td>
<td>8.03</td>
<td>0.655*</td>
<td>0.098</td>
<td></td>
</tr>
</tbody>
</table>

*Significant, p < 0.05*
Table 2 shows that the mean and standard deviation scores of parental attention were 28.77 and 6.88, and the mean and standard deviation scores of criminal behaviour of Borstal students were 31.08 and 8.03 respectively. This relationship between parental attention and criminal behaviour was however statistically significant ($r = 0.655$, $df = 448$, $p = < 0.05$) based on the Pearson Product Moment Correlation Analysis. The null hypothesis was rejected, which implies that there was a statistically significant relationship between Parental Attention and Criminal Behaviour of students in Borstal Institutions in Nigeria. This relationship was positive at 0.05 level of significance.

**Hypothesis Two:** There is no significant relationship between educational experience and criminal behaviour of students in Borstal Institutions. The hypothesis was tested using Pearson Product Moment Correlation. The results of the analysis are presented in Table 2.

*Table 2: Relationship between Educational Experience and Criminal Behaviour of Students*

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>Std. dev</th>
<th>r-cal</th>
<th>r-tab</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educational Experience</td>
<td>30.65</td>
<td>15.92</td>
<td>0.340*</td>
<td>0.098</td>
<td>Significant</td>
</tr>
<tr>
<td>Criminal Behaviour</td>
<td>31.08</td>
<td>8.03</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Significant, $p<0.05$

Table 2 shows that the mean and standard deviation scores of educational experience are 30.65 and 15.92, and the mean and standard deviation scores of criminal behaviour of Borstal students are 31.08 and 8.03 respectively. The relationship between educational experience and criminal behaviour is statistically significant ($r = 0.340$, $df = 448$, $p= < 0.05$). Therefore the null hypothesis is rejected, which implies that there is a statistically significant relationship between educational experience and criminal behaviour of Borstal students in Nigeria institutions. This relationship is linear and positive at 0.05 level of significance.

**Discussion**

The findings obtained in the study shows that parental attention is significantly related to adolescent criminal behaviour. For instance a home where adolescents are...
shown love, care and affection will likely not produce adolescents who develop criminal behaviour. This study confirmed the findings of Henrich, Brookmeyer and Shahar (2005) that young people who reported feeling a stronger connection with their parents were less likely to commit violent offences with a weapon. Similarly Herrenkohl, Hill, Chung, Guo, Abott and Hawkins (2003) found that young people who exhibited less violent behaviour were more likely to hold stronger attachment to their parents. Chapple and Hope (2003) further found that parental attachment lowered the likelihood of intimate violence in their sampled students. Also, the finding supports the conception in this study of the role that parental attention can play in insulating young people from criminal activity. It is very clear that parents have a world of influence over their children and basically mold and shape their children into adults. Parents need to be more supportive and responsive to their children. Parents need to pay more attention to the affairs of their children so as to reduce the rate of delinquency in their children.

However, this result contradicts Brannigan, Gemmell, Pevalin and Wade (2002) who respectively posited that positive parental contact and parental support were not found to affect childhood misconduct. Such findings refute the notion that parental attention necessarily impacts youth aggression.

The finding for hypothesis two revealed that a significant relationship existed between educational experience and criminal behaviour of students of Borstal Institution. This is an indicator that school experience can predict criminal behaviour. The reason is not farfetched, because boys with negative school experience could become dropouts, this could lead them to become street boys or touts. This result confirmed the findings of Sprott (2004) who postulated that young people who behaved violently often come from classrooms that provided little emotional support to the students. Students who were in classrooms characterized as having stronger supportive and social interactions at the ages of 10 and 11 were less likely to behave violently at the age of 12 and 13. Further, Sprott (2004) speculated whether school support plays a significant role in deterring future violent offending resulting from inadequate bonding in other aspects of the child’s life. This research found that strong attachment to school was associated with less violent offending. As a result, they concluded that the important effect of school attachment in the lives of young people should not be minimized.
The findings highlighted the potential role that parents and schools can play in preventing violent offending amongst young people. Similar conclusions were found by Resnick, Ireland and Borowsky (2004). This finding is also in line with Banyard and Quatey (2006), who were of the view that school attachment, amongst other social control factors, protected young people from violent behaviour.

**Conclusion and Recommendations**

On the basis of the findings for this study, it is concluded that there existed a significant interaction between parental attention, educational experience, and indulgence in criminal behavior of students in Borstal Institutions in Nigeria. Hence, the following recommendations are proffered for effective institutionalizations of juvenile offenders in Nigerian Borstal Institutions, namely: counseling psychologists should be deployed to secondary schools for early identification of personal social issue among students. This will go a long way in reducing cases of delinquency in students. Parents (especially mothers) must set aside sufficient time to stay with children at home. Adequate monitoring, control, supervision, irrespective of the gender, school location and age are paramount factors in positive and effective child rearing. Adequate parental love, warmth, care, attention are factors for effective parenting.

**References**


Does satellite television programming satisfy Ethiopian secondary school students?

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ABSTRACT

The Ethiopian development plans have dealt with the education sector as a key strategic pillar. There have been a lot of educational efforts. In particular, to cope with a lack of qualified teachers, lack of good teaching models, and remote rural regions separated from educational benefits, the Ethiopian Ministry of Education has made efforts to utilize educational media, such as satellite TV programming, to improve the quality of secondary education for the last decade. However, there was lack of national investigation in the aspect of systemic evaluation to measure the effectiveness of the satellite TV programming. This study aims to investigate the actual practice and effectiveness of the satellite TV programming in Ethiopian secondary schools. To achieve the goal, one questionnaire was developed based on the CIPP model. Two secondary schools were selected and 228 students (Grade 9-12) participated in the survey. Data collected from them were utilized for descriptive & frequencies analysis, chi-square test, and multiple regression analysis. The results indicated that Ethiopian students utilizing satellite TV programming scored highly in the evaluation areas of context, input, process, and product of the program. It was also found that learning demand, learning content, and class management were factors affecting the satisfaction in the satellite TV programming. These findings suggested that satellite TV programming could play an important role in improving the quality of Ethiopian secondary education. As a conclusion, several educational and administrative strategies to improve the TV program were recommended.

Keywords: Educational ICT, Satellite TV Program, Secondary Education, Ethiopia.

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Introduction

Located in the Horn of Africa, Ethiopia has made a lot of efforts toward bettering the national economy, especially poverty eradication. The main national development plans are as followings (MoFED, 2013); Agricultural-Development-Led Industrialization (ADLI)(2002), Sustainable Development and Poverty Reduction Program (SDPRP) (2002/03-2004/05), Plan for Accelerated and Sustained Development to End (PASDEP) (2005/06-2009/10), Growth and Transformation Plan (GTP) (2010/11-2014/15). Through the PASDEP, Ethiopian economic growth reached average 11 percent per annum and mobile telecom network capacity increased 0.5M users (2005/06) to 25M users (2009/10). The number of telecom customers grew from 0.56M users (2004/05) to 6.5M users (2009/10). CDMA wireless network covered 90 percent of Ethiopia and 10,000km of fiber optic cable and a National Network Operation Center was established. And GTP aims to eradicate poverty and to reach the level of a middle-income economy as of 2020-2023. These plans are aligned with Millennium Development Goals (MDGs).

The Ethiopian development plans have dealt with the education sector as a key strategic pillar. For example, GTP has goals to achieve in general education area; Scaling up educational quality by building communities’ sense of ownership of educational quality by initiating integrated community mobilization, at all levels, using every media, digitalized (plasma based) secondary education, more Alternative Basic Education Centers. For supporting those plans in the educational sector, several national educational plans have been implemented; Education & Training Policy (ETP) (1994), General Education Quality Improvement Package (GEQIP) Ⅰ & Ⅱ, Education Sector Development Program (ESDP) Ⅰ (1997/98-2001/02), Ⅱ (2002/03-2004/05), Ⅲ (2005/06-2009/10), Ⅳ (2010/11-2014/15).

Due to these educational plans, the system of Ethiopian education, which consists of preschool, primary education, secondary education, TVET, and higher education, has sharply developed. In particular, a lot of educational indicators of general education (primary & secondary education) have been on the increase. Net Enrollment Ratio (NER) of primary education (Grade 1 to 8) rapidly increased from 24.9% in 1996/07 to 85.9% in 2012/13 (Grade 1-4: 95.5%; Grade 5-8: 47.3%). ESDP Ⅳ plans to achieve 100% of NER until 2015. But there is relative distribution of each region to the national NER (Educational Statistics Annual
Abstract, 2013). Afar has the lowest achievement (41.5%) compared with other regions (Gambella: 98%, Addis Ababa: 69.4%). In case of secondary education, NER (2012/13) falls sharply (Grade 9-10: 19.4%, Grade 11-12: 5.3%). This may be due to delayed graduation from primary school, examination barriers and financial barriers. And enrollment of children with special educational needs (blind, physically & intellectually disabled, deaf, etc.) was 6,551. A five year (2008/09-2012/13) trend of Pupil-Teacher Ratio (PTR) for grades 9-12 shows that PTR has been continually reduced from 41 to 28.7. But still there is regional differences in PTR (Somali : 47.4%; Benishangul Gumuz: 19.9%).

In contrast with primary education, the percentage of qualified teachers is higher in secondary education. Nationally, of all the secondary teachers, 91.5% are qualified for their level of secondary teaching. There is, however, considerable variation by region in the percentage of qualified teachers (Tigray: 96.2%; Afar: 20.8%).

Even though there have been a lot of educational efforts made, many problems have been discovered in the Ethiopian educational sector. To cope with a lack of qualified teachers, lack of good teaching models, and remote rural regions separated from educational benefits, Ethiopian Ministry of Education has made efforts in utilizing educational media such as satellite TV programing for improving the quality of secondary education.

However, up to now, there was a lack of national investigation and more systemic evaluation for measuring the effectiveness of satellite TV programing. Accordingly, this study aims to investigate the actual practice and effectiveness of satellite TV programs in Ethiopian secondary schools. Research problems are as follows:

. What is the present status of satellite television programing in Ethiopia?
. What are the factors which are influential in students’ satisfaction in satellite TV programing?

**Challenges of Existing Satellite Television Program and New Opportunity**

The Ethiopian government launched satellite TV programing as part of the national SchoolNet Initiative in 2004, which is a nationwide network of Ethiopia’s secondary schools. Today, the Center for Education ICT (CEICT), an ICT-leading organization for general education under the Ministry of Education (MOE),
broadcasts 2978 television programs of 10 subjects (English, mathematics, chemistry, biology, physics, geography, civics, economics, technical drawing, and general business) for grade 9-12. This program is broadcasted via satellite and secondary students in class watch the programs on plasma televisions for 20 minutes or so out of the 40 minutes class ([Figure 1]).

As of 2014, there are about 2000 secondary schools, including preparatory schools (Grade 11 & 12), of which 1278 schools are well equipped to receive the television broadcast from the center, however only 69% (893 secondary schools) among the 1278 secondary schools are properly utilizing the satellite TV programming. Even though satellite TV programming has contributed to improving the quality of the secondary education in Ethiopia, there are several main constraints in the program. First, the basic problem is a lack of electricity. There are many cases where each school is not equipped with generators for the frequent blackouts. Second, there is a lack of maintenance and accessories for the Plasma TVs and VSAT apparatus installed in the schools. Third, there is still a lack of proper collaboration among CEICT, Ethio Telecom, regional educational bureaus and schools. And the critical problem is that the TV programing is delivered one way, not considering the teacher-student and student-student interaction. In addition, there is a limitation in satisfying a variety of special education needs such as cognitive & physical disability, although the program provides the service of sign language for students with a hearing disability.

Figure 1. Structure of Operating Satellite TV Program for Ethiopian Secondary Education
The Ethiopian Ministry of Education continues to take efforts for overcoming these shortcomings in secondary education ([Figure 2]).

Figure 2. Future Structure of Satellite TV Program in Ethiopian Secondary Education

As one strategy, the ministry has launched an initiative to build a Local Area Network (LAN) in the first phase for 120 secondary schools. Each school computer laboratory will be equipped with a minimum of 80 thin client computers throughout the country. The ministry already carried out the pilot test for its effectiveness. Currently the ministry is designing another e-learning project under the General Education Quality Improvement Program II (GEQUIP II), which is supported by the World Bank. As a part of the efforts to enhance the quality of general education, especially individual, self-directed, and self-paced learning environments through ICT, the MOE and CEICT has designed a program targeting 300 secondary schools nationwide. This program hopes to enhance the existing in-class video learning service, establish a computer laboratory-based learning experience managed through a private cloud service, and expand the reach of online-based out-of-class learning using mobile devices. An extension to this program will include the participation of twelve secondary schools in innovative programs to explore the use of mobile-based technologies for strengthening the quality of general education in emerging regions.
Method Participants

Participants

This study aims to investigate the actual practice and effectiveness of satellite TV programming in Ethiopian secondary schools. To achieve the goal, two secondary schools, including preparatory schools, were selected. A school is located in the urban area of Addis Ababa City and B school is located in the rural area of Oromia state. 228 students (Grade 9-12) from two regions participated in the survey.

Table 1. Participants’ Information

<table>
<thead>
<tr>
<th>Location</th>
<th>Number (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>114 (50)</td>
</tr>
<tr>
<td>Rural</td>
<td>114 (50)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender</th>
<th>Number (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>122 (53.5)</td>
</tr>
<tr>
<td>Female</td>
<td>106 (46.5)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Grade</th>
<th>Number (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade 9</td>
<td>40 (21.1)</td>
</tr>
<tr>
<td>Grade 10</td>
<td>71 (31.1)</td>
</tr>
<tr>
<td>Grade 11</td>
<td>75 (32.9)</td>
</tr>
<tr>
<td>Grade 12</td>
<td>34 (14.9)</td>
</tr>
</tbody>
</table>

Total 228 (100)

Instrumentation

To investigate the actual practice and effectiveness of satellite TV programming in Ethiopia, a questionnaire was developed. It was based on the CIPP (Context, Input, Process, and Product) model, which was designed by Stufflebeam (1985). Based on Figure 3 below, 23 items were developed (See Appendix). They are validated through reviews by 3 program experts from the Center for Educational ICT (CEICT), the Ministry of Education and 10 students from a secondary school.
Procedures

Reading of official documents for literature reviews, personal interviews with related officials from CEICT, and searching for internet sites of the Ministry of Education and Ministry of Communication Information Technology, Ethiopia were carried out. Based on these and the CIPP model, a questionnaire was developed and validated. Data gathered from secondary school students were analyzed by SPSS. Descriptive & frequencies analysis, chi-square test, and multiple regression analysis were performed for answering to the research questions.

Results

The scores from some items (a 5-point Likert-type) of the survey for evaluating the effectiveness of satellite TV programing ranged from 3.11 to 4.12, indicating that most of the students agreed that the satellite TV programing was satisfactory (Table 2). And students responded to other questions as follows; 41.7% of students selected “the program is helpful for understanding the class” as the most important motive for participating in the satellite TV programing. And as a reason why the program is interrupted during their class, they chose ‘plasma TV trouble’ (40.4%), lack of electricity (28.1%), and others (23.6%) in order. They also responded that the program was helpful in the aspect of ‘more understandable in learning’ (30.3%), improving English skills (23.2%), rich learning materials (10.5%), and more...
attention to the class (10.1%) in order. For a strategy of improving the program, they responded ‘more interesting lesson (30.7%)’, ‘better stability of program transmission (13.4%), better quality of screen design (11.8%), and faster maintenance service of plasma TV (11.8%) in order. And 38.2% of respondents answered that they never watched satellite TV programming in their class. 34.1% of students chose ‘no attention of teacher’ to the question ‘why they did not watch the program even though it was broadcasted’.

Table 2. Mean and Standard Deviation (SD) for Main Variables Related with Satisfaction of Satellite TV Program

<table>
<thead>
<tr>
<th>Area</th>
<th>Sub-Area</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning Demand</td>
<td>Learner’s level</td>
<td>216</td>
<td>3.96</td>
<td>1.114</td>
</tr>
<tr>
<td>Learning Content</td>
<td>Interests</td>
<td>226</td>
<td>4.00</td>
<td>1.170</td>
</tr>
<tr>
<td></td>
<td>Customized learning</td>
<td>226</td>
<td>3.57</td>
<td>1.404</td>
</tr>
<tr>
<td></td>
<td>Appropriateness</td>
<td>221</td>
<td>4.06</td>
<td>1.208</td>
</tr>
<tr>
<td></td>
<td>Compensation of face-to-face class</td>
<td>219</td>
<td>3.61</td>
<td>1.313</td>
</tr>
<tr>
<td></td>
<td>Understanding</td>
<td>219</td>
<td>3.55</td>
<td>1.282</td>
</tr>
<tr>
<td></td>
<td>Usefulness</td>
<td>224</td>
<td>3.87</td>
<td>1.349</td>
</tr>
<tr>
<td>Learning Environments</td>
<td>Safety</td>
<td>224</td>
<td>3.61</td>
<td>1.490</td>
</tr>
<tr>
<td></td>
<td>Interaction with TV program</td>
<td>219</td>
<td>3.52</td>
<td>1.342</td>
</tr>
<tr>
<td>Human Resources</td>
<td>Perception of teacher</td>
<td>221</td>
<td>4.03</td>
<td>1.232</td>
</tr>
<tr>
<td></td>
<td>Knowledge of teacher</td>
<td>224</td>
<td>4.12</td>
<td>1.157</td>
</tr>
<tr>
<td>Class Management</td>
<td>Interaction with TV teacher</td>
<td>221</td>
<td>3.57</td>
<td>1.339</td>
</tr>
<tr>
<td></td>
<td>Affirmative class environment</td>
<td>220</td>
<td>3.11</td>
<td>1.384</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>General satisfaction of TV program</td>
<td>222</td>
<td>3.54</td>
<td>1.268</td>
</tr>
<tr>
<td></td>
<td>Learning contents</td>
<td>156</td>
<td>3.91</td>
<td>1.132</td>
</tr>
<tr>
<td></td>
<td>TV teacher</td>
<td>157</td>
<td>3.94</td>
<td>1.102</td>
</tr>
</tbody>
</table>

A chi-square test was performed to determine whether the levels of satisfaction (general satisfaction, learning contents, TV teacher) were equal irrespective of location (urban and rural), gender (male and female), and grade (Grade 9-12). Only levels of general satisfaction of satellite TV program were not equal at the variables of location ($\chi^2=16.270$, df=4, p=.003) (Table 3) and gender($\chi^2=15.146$, df=4, p=.004) (Table 4).
Table 3. Chi-square test of location and general satisfaction of satellite TV program

<table>
<thead>
<tr>
<th></th>
<th>Strongly disagree</th>
<th>Somewhat disagree</th>
<th>Neutral</th>
<th>Somewhat agree</th>
<th>Strongly agree</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>11 (9.7%)</td>
<td>12 (10.6%)</td>
<td>30 (26.5%)</td>
<td>42 (37.2%)</td>
<td>18 (15.9%)</td>
<td>113 (100%)</td>
</tr>
<tr>
<td>Rural</td>
<td>12 (11%)</td>
<td>12 (11%)</td>
<td>12 (11%)</td>
<td>34 (31.2%)</td>
<td>39 (35.8%)</td>
<td>109 (100%)</td>
</tr>
<tr>
<td>Sub-total</td>
<td>23 (10.4%)</td>
<td>24 (10.8%)</td>
<td>42 (18.9%)</td>
<td>76 (34.2%)</td>
<td>57 (25.7%)</td>
<td>222 (100%)</td>
</tr>
</tbody>
</table>

$\chi^2=16.270$, df=4, p=.003

Table 4. Chi-square test of gender and general satisfaction of satellite TV program

<table>
<thead>
<tr>
<th></th>
<th>Strongly disagree</th>
<th>Somewhat disagree</th>
<th>Neutral</th>
<th>Somewhat agree</th>
<th>Strongly agree</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>12 (10%)</td>
<td>9 (7.57%)</td>
<td>24 (20%)</td>
<td>33 (27.5%)</td>
<td>42 (35%)</td>
<td>120 (100%)</td>
</tr>
<tr>
<td>Female</td>
<td>11 (10.8%)</td>
<td>15 (14.7%)</td>
<td>18 (17.6%)</td>
<td>43 (42.2%)</td>
<td>15 (14.7%)</td>
<td>102 (100%)</td>
</tr>
<tr>
<td>Sub-total</td>
<td>23 (10.4%)</td>
<td>24 (10.8%)</td>
<td>42 (18.9%)</td>
<td>76 (34.2%)</td>
<td>57 (25.7%)</td>
<td>222 (100%)</td>
</tr>
</tbody>
</table>

$\chi^2=15.146$, df=4, p=.004

Multiple regression was conducted to determine the accuracy of the independent variables (learning demand, learning content, learning environments, human resources, class management) predicting the dependent variable (satisfaction). Regression results in Table 5 indicate that the overall model of the five independent variables significantly predicts satisfaction of satellite TV program. A summary of regression coefficients is presented in Table 6 and indicates that only three variables, learning demand, learning content, and class management, significantly contributed to the model. This model accounts for 37% of the variance in satisfaction of satellite TV program.

Table 5. ANOVA Table

<table>
<thead>
<tr>
<th></th>
<th>SS</th>
<th>Df</th>
<th>MS</th>
<th>F</th>
<th>Sig.</th>
</tr>
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<tr>
<td>Regression</td>
<td>45.947</td>
<td>5</td>
<td>9.189</td>
<td>17.026*</td>
<td>.00</td>
</tr>
<tr>
<td>Residual</td>
<td>72.325</td>
<td>134</td>
<td>.540</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>118.272</td>
<td>139</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p<.01
Table 6. Results of Multiple Regression

<table>
<thead>
<tr>
<th>Variable</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(constant)</td>
<td>.637</td>
<td>.366</td>
<td>1.739</td>
<td>.08</td>
</tr>
<tr>
<td>Learning demand</td>
<td>.159</td>
<td>.064</td>
<td>.192</td>
<td>2.461*</td>
</tr>
<tr>
<td>Learning content</td>
<td>.327</td>
<td>.105</td>
<td>.273</td>
<td>3.129*</td>
</tr>
<tr>
<td>Learning environments</td>
<td>.038</td>
<td>.065</td>
<td>.043</td>
<td>.578</td>
</tr>
<tr>
<td>Human resources</td>
<td>.095</td>
<td>.080</td>
<td>.096</td>
<td>1.193</td>
</tr>
<tr>
<td>Class management</td>
<td>.224</td>
<td>.061</td>
<td>.282</td>
<td>3.675*</td>
</tr>
</tbody>
</table>

R²adj = .37, *p<.05

Conclusion

This study investigated the actual practice and effectiveness of satellite TV programming in Ethiopian secondary schools. The results indicated that Ethiopian secondary school students utilizing satellite TV programming scored highly in the evaluation areas of context, input, process, and product of the program. It was also found that learning demand, learning content (interests, customized learning, appropriateness, supporting face-to-face class, understanding, usefulness) and class management (interaction with TV teacher, affirmative class environment) were factors affecting satisfaction with the satellite TV programming. These findings suggest that satellite TV programming can play an important role in improving the quality of Ethiopian secondary education.

As a conclusion to this study, several educational and administrative strategies are recommended as follows; First, each secondary school should be equipped with basic infrastructure, such as regular electricity and generators in case of blackout.

Second, immediate technical service should be provided by regional technicians when the plasma TV has a problem.

Third, motivational instructional design should be considered for improving students' active participation in satellite TV programming. For a strategy of improving the quality of the programming, 30.7% of respondents chose 'more interesting lesson.' In particular, for the preparation of future satellite TV programming in Ethiopian secondary education, e-learning should be served on a cloud system, teachers in schools and program experts in the Center for
Educational ICT (an institution leading educational ICT under the Ethiopian ministry of education) need to be competent in instructional design.

Fourth, factors such as location (urban and rural) and gender should be considered carefully when designing, developing, and operating satellite TV programing. This is why they may have had an effect on the satisfaction of the programing.

Fifth, there should be countermeasures for increasing teachers’ integration of the satellite TV programing during the class. As mentioned above, 34.1% of students responded ‘no attention of teacher’ to the question ‘why they did not watch the program even though it was broadcasted’. It is the educator’s perceived barrier to technology that must be overcome (Robinson, 2007). As a strategy for this, the concept of homophily (Rogers, 1995) needs to be applied. That is, for equal colleagues to introduce it to each other and then to be successful at using the technology increases the possibility of its adoption and the integration of technology into the class. It is important to share best practices in utilizing satellite TV programing in class.

Sixth, leadership training of ICT for principals as well as teachers can be suggested. Diffusion of an innovation cannot be accomplished without teachers’ and educational administrators’ engagement and attention.

Many students have complained about a lack of interaction of TV teacher-student, student-student and student-learning contents. Although radical change is difficult, due to financial and technical reasons, alternative instructional TV such as ‘one-way video with two-way audio may be chosen; According to a study (Simpson, et al., 1993), the most successful instructional TV technologies were those allowing continuous two-way audio communication between classrooms with either one-way or two-way video, which were effective both in terms of student performance and acceptance. To combat the Ethiopian satellite TV programing shortcoming of one way delivery, using two-way audio may be a good alternative. And for improving one way delivery of learning contents, individual, self-directed, self-paced learning environments should be designed and developed.

Fortunately the Ethiopian Ministry of Education continues to take efforts for overcoming the shortcomings in secondary education. Currently the Ethiopian Ministry of Education is designing an e-learning project under the General Education Quality Improvement Program II. As a part of the efforts to enhance the
quality of secondary education, it has designed a program targeting 300 secondary schools nationwide, which hopes to enhance the existing in-class video learning service, establish a computer laboratory-based learning experience managed through a private cloud service, and expand the reach of online-based out-of-class learning using mobile devices. It will be very helpful for providing satellite TV programing that is appropriate for learner’s learning demands and level. Education utilizing ICT has the potential to overcome the issues of cost, the lack of teachers, and poor quality of education as well as overcome time and distance barriers (McGorry, 2002). However, although the use of ICT in educational settings by itself may act as a catalyst for change, the change does not always happen. More instructional and administrative efforts are needed for its successful performance.

More research is needed to discover more details of strategies for improving the effectiveness of the satellite TV programing in the context of e-learning in the future and to understand why secondary teachers have failed to integrate satellite TV programing into the class.

References


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communications technologies into the classroom (pp. 272-278). Information Science Publishing, Hershey, USA.


Distance Education, Vol. 14, No. 1, pp. 147-164.

## Appendix

<table>
<thead>
<tr>
<th>Category</th>
<th>Area</th>
<th>Sub-Area</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Context</strong> (5)</td>
<td>Level of Participation (3)</td>
<td>Frequency of Use</td>
<td>How often do you watch Satellite TV programs in your class per week?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Duration of time</td>
<td>How long do you watch Satellite TV programs per one class?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Reason of No use</td>
<td>Why don’t you watch the program?</td>
</tr>
<tr>
<td></td>
<td>Learning Demand (1)</td>
<td>Learner’s level</td>
<td>Is satellite TV program appropriate at learning level of learner?</td>
</tr>
<tr>
<td></td>
<td>Perception on Participation (1)</td>
<td>Motive of Participation</td>
<td>What is your most important motive participating in the satellite TV program?</td>
</tr>
<tr>
<td><strong>Input</strong> (9)</td>
<td>Learning Content (6)</td>
<td>Interests</td>
<td>Is learning content in satellite TV program interesting?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Customized learning</td>
<td>Can you study learning contents in satellite TV program customized at your level of learning?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Appropriateness</td>
<td>Does learning content in satellite TV program give rich and reliable information?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Compensation of Face-to-Face class</td>
<td>Does satellite TV program compensate for face-to-face class?</td>
</tr>
<tr>
<td></td>
<td>Learning Environments (3)</td>
<td>Understanding</td>
<td>Is learning content in satellite TV program understandable clearly?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Usefulness</td>
<td>Does satellite TV program supply enough related material and cases?</td>
</tr>
<tr>
<td><strong>Process</strong> (4)</td>
<td>Human Resources (2)</td>
<td>Perception of teacher</td>
<td>Is the television teacher helpful for understanding learning contents?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Knowledge of teacher</td>
<td>Does the television teacher have enough knowledge in the subject?</td>
</tr>
<tr>
<td></td>
<td>Class Management (2)</td>
<td>Interaction with TV teacher</td>
<td>Can you interact with the television teacher?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Affirmative class environment</td>
<td>Do you feel close relationship with the television teacher?</td>
</tr>
<tr>
<td><strong>Product</strong> (5)</td>
<td>Satisfaction (3)</td>
<td>Overall level of satisfaction</td>
<td>Is satellite TV program generally satisfactory?</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Is learning content in satellite TV program satisfactory?</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Is television teacher satisfactory?</td>
</tr>
<tr>
<td></td>
<td>Effectiveness (1)</td>
<td>Level of help</td>
<td>In what aspect is the program helpful?</td>
</tr>
<tr>
<td></td>
<td>Improvements (1)</td>
<td>Overall improvements</td>
<td>What is your opinion of improvements?</td>
</tr>
</tbody>
</table>
Empowering Girls and Women for Educational Opportunities in Nigeria: Policy Initiatives, Situation Analysis, Challenges and the Way Forward

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Department of Educational Administration Faculty of Education
University of Lagos, Lagos, Nigeria

ABSTRACT

The relevance of gender equality to the development process underscores the need for creating opportunities for girls and women to have access to all levels of education – primary, secondary and tertiary. Women require formal education for self and national development. Since Nigeria has a significant population of girls and women, it is imperative that their education is given a pride of place. This paper examines the policies that have been made to promote the education of girls and women at the three levels of education (basic, post-basic and tertiary) in Nigeria, and the situation of girl-child and women’s education in the country. The paper also discusses the challenges confronting education of girls and women, such as high number of out-of-school children caused by child labor practices, early marriage and teenage pregnancy; inadequate female participation rates in higher education; etc. Some actions that could be taken to address the challenges are recommended. These include equalizing access to quality education, provision of welfare support for pupils/students, the establishment of an open school system, enforcing laws on compulsory school attendance at the basic education level, economic empowerment of women, and the promotion of science and technological education among women.

Key words: Women, Educational Opportunities, Policy, Challenges, Nigeria.

Background

Education for girls and women has attracted the attention of people all over the world. Recognition of the importance of female education has been predicated to be a central issue in the education field. Writers have observed that women have a role to play in national development. It is believed that education for women would yield dividends in the areas of reduced fertility rate, infant and maternal mortality and helping women to participate in national development (Emunemu and

* Corresponding Author: Ramoni Ayobami Alani, ayoalani@yahoo.com
Ayeni, 2003). Women who are educated will understand the benefits of having a small family, which they can easily provide for. By giving birth to the number of children that family resources can cope with, family members will enjoy a higher quality of life. This is especially necessary in a country such as Nigeria where the per-capita income is still low. According to the World Bank, Nigeria’s Gross Domestic Product (GDP) per-capita was $1,555 in 2012, while the Gross National Income (GNI) per-capita was $1,430 for the same year (http://data.worldbank.org/country/nigeria). The growth rate of the population is also reported to be 3.2% per annum (BusinessDay, August 14, 2013). This population growth rate is high when compared with the situation in developed countries (According to United Nations, Department of Economic and Social Affairs, Population Division, 2013, it was 0.923 for USA; Canada, 1.129; France, 0.573; Germany, 0.196; Netherlands, 0.38; Belgium, 0.808 for 2005 - 2010). Giving formal education to women can also reduce infant and maternal mortality since educated women will be receptive to modern health practices instead of depending on traditional health facilities. Education empowers women by inculcating skills in them, thus making them employable or becoming self-employed in order to contribute to family income and national development. Educated women (professionals) also serve as role models to the young ones who are encouraged to pursue formal education for themselves in order to enjoy the same quality of life that educated professionals are enjoying.

Todaro and Smith (2009) also underscore the importance of women in the development process. They posit that women are responsible for child upbringing and the amount of resources they are able to contribute to this duty will determine whether or not poverty will be banished from the family. Mothers also tend to spend a higher proportion of the income they earn to the advantage of their children’s health and education than fathers do. For women to play their role in national development, Todaro and Smith observe that every society should empower its women and invest in them. Therefore, attention should focus on the education of girls and women, because as Todaro and Smith mention, all over the world, women have a tendency to be poorer than men. They also suffer more deprivation than men in the areas of health and education and in liberty in every ramification.

Nigeria has a significant population of women. The United States Bureau of the Census, International Data Base shows that, in 2010, there were 75,657,000 males and 74,617,000 females (making a total of 150,274,000 people) in the country. The gender distribution of the population of persons within the age group 5 – 9 was
11,073,000 males and 10,997,000 females; 10 -14, 9,865,000 males and 9,817,000 females; 15 -19, 8,510,000 males and 8,478,000 females; and 20 - 24, 7,014,000 males and 6,914,000 females. These age groups correspond with the school age groups for the three levels of education.

The National Bureau of Statistics (2013) reported that there were 51.4% males in 2011, while females constituted 48.6% of the Nigerian population, although Kwara State (one of the States of the Federation) had 50% each for the two genders. Another State’s (Yobe) population had 45.3% females. Those aged 0 to 9 years who formed 26.2% of the population and 44.1% of the active working population were females. Based on these statistics, it is evident that resolute attention has to be given to the education of girls and women to ensure gender equity, self-development, to promote their empowerment and for these members of the Nigerian population to contribute to national development.

**Educating Girls and Women: Policy Initiatives**

There are three levels of education in Nigeria: primary, secondary and tertiary. However, the Nigerian government introduced the Universal Basic Education (UBE) program on September 30, 1999. The UBE scheme covers primary education (a 6-year program) and junior secondary education (a 3-year program). Senior secondary education also lasts three years. Tertiary education is given in three types of institutions: colleges of education, polytechnics and monotechnics, and universities. Colleges of education produce middle level teachers who are qualified to teach in primary and junior secondary schools. Polytechnics and monotechnics also train middle level personnel in engineering, other technologies, applied science, business and management; and agriculture, fisheries, forestry, surveying, nursing, etc. respectively. The universities specialize in the training of high level manpower in all areas of knowledge such as administration/management science, agriculture, arts education, engineering/technology, environmental sciences, law, medicine, pharmacy, science, social sciences, veterinary medicine and dentistry. In this section of the paper, discussions on the policies that have been put in place to promote female education focuses on these three levels of education.

Nigeria was a party to the World Declaration on Education for All and the Framework for Action to meet basic learning needs, which were collectively adopted by all concerned countries in Jomtien, Thailand in 1990. The United Nations
Educational, Scientific and Cultural Organization, UNESCO (2002a, p.1) posits that two of the goals of the Education for All (EFA) program are: (1) “Universal access to, and completion of primary education by the year 2000”, and (2) “Reduction of adult illiteracy rate (…) to say, one-half its 1990 level by the year 2000, with sufficient emphasis on female literacy to significantly reduce current disparity between male and female illiteracy rate”. With these goals in mind, the affected nations were supposed to close the educational gap between boys and girls, men and women. To this end, the federal government enacted the Child’s Right Act, 2003 which, among other provisions, spells out the rights of the child and how a child should be treated. The Act makes provision for the child’s right to free, compulsory and universal basic education. In the same vein, the same government promulgated the Compulsory, Free Universal Basic Education Act 2004 to give legal backing to the operation of the UBE program. The Trafficking in Persons (Prohibition) Law Enforcement and Administration (Amendment) Act, 2005 forbids the employment of a child in any capacity except by a member of his/her family or for light work of an agricultural, horticultural or domestic nature. This Law is to further ensure that a child (girl or boy) enrolls for universal basic education.

Senior secondary education in public schools is highly subsidized by state and federal governments. In fact, in federal government colleges at present, the policy is that students should continue to enjoy tuition-free education, although students or their parents pay sundry fees such as boarding, examination, deposit fees, development levy, etc. Some state governments, for example Lagos and Ogun States, have also abolished all manner of fees except the boarding fees paid by students in Lagos State and a stipend paid in Ogun State. Both male and female students have benefitted from this arrangement. However, it is a disadvantage for female students if one considers the situation in Nigeria where some non-literate parents who have to choose between the education of the girl-child and the boy-child always favor the latter. In such cases, the belief is that the girl-child’s education will be to the advantage of the husband’s family, while the boy-child’s education is deemed to be an investment in parents’ security when they grow old (Psacharopoulous and Woodhall, 1985). Such girls start work in the home at an early age to contribute to family income.

Federal and state governments have established more universities in order to increase access to university education. The federal government has also granted licenses to private organizations and individuals to set up universities. From 13 in
1975/76 academic session, the number of universities had risen to 129 as of September 2013. All the universities run full-time programs to satisfy the demand of their clients. A considerable number of the government-owned universities run part-time programs to meet the educational needs of working people who cannot benefit from full-time programs. The National Open University of Nigeria (NOUN), which was shut down by the ruling military administration in 1984, was revived in 2001 to create more access to university education for the working people. Both men and women have gained from this expansion of the capacity of the university system to enroll more students.

**Situation Analysis**

Table 1 shows pupils’ enrolment at the primary school level between 1991 and 2010, the period for which data were available. The primary school level forms the first six years of the 9-year basic education program. The table shows that the female participation rate was below 49% for all years, in spite of the fact that females constitute 49% of the Nigerian population (Jegede, 2000; National Bureau of Statistics, 2013).

*Table 1: Primary School Enrolment in Nigeria by Gender (1991 to 2010)*

<table>
<thead>
<tr>
<th>Year</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
<th>%Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>1991</td>
<td>7,741,897</td>
<td>6,034,957</td>
<td>13,776,854</td>
<td>43.8</td>
</tr>
<tr>
<td>1992</td>
<td>8,273,824</td>
<td>6,532,113</td>
<td>14,805,937</td>
<td>44.1</td>
</tr>
<tr>
<td>1993</td>
<td>8,930,650</td>
<td>6,939,680</td>
<td>15,870,280</td>
<td>43.7</td>
</tr>
<tr>
<td>1994</td>
<td>9,056,367</td>
<td>7,134,580</td>
<td>16,190,947</td>
<td>44.1</td>
</tr>
<tr>
<td>1995</td>
<td>8,729,421</td>
<td>7,011,657</td>
<td>15,741,078</td>
<td>44.5</td>
</tr>
<tr>
<td>2004</td>
<td>11,803,067</td>
<td>9,551,280</td>
<td>21,354,347</td>
<td>44.7</td>
</tr>
<tr>
<td>2005</td>
<td>12,168,834</td>
<td>9,907,567</td>
<td>22,076,401</td>
<td>44.9</td>
</tr>
<tr>
<td>2006</td>
<td>11,895,194</td>
<td>9,822,595</td>
<td>21,717,789</td>
<td>45.2</td>
</tr>
<tr>
<td>2007</td>
<td>11,086,997</td>
<td>9,382,398</td>
<td>20,469,395</td>
<td>45.8</td>
</tr>
<tr>
<td>2008</td>
<td>10,252,000</td>
<td>8,728,395</td>
<td>18,980,395</td>
<td>46.0</td>
</tr>
<tr>
<td>2009</td>
<td>10,154,860</td>
<td>8,663,684</td>
<td>18,818,544</td>
<td>46.0</td>
</tr>
<tr>
<td>2010</td>
<td>10,215,179</td>
<td>8,826,988</td>
<td>19,042,167</td>
<td>46.4</td>
</tr>
</tbody>
</table>

*Note:* Data for 1996 to 2003 were not available.


The Federal Ministry of Education (2009) reports that data from the 2006 School Census showed that, at the basic education level, more males (65%) were registered in the north than females (35%), while there was a near gender parity in
the south. At the junior secondary school level, gender difference was recorded: there were 55% and 45% males and females in schools respectively. One of the actions that have been taken to address the problem of access at this level was the establishment of 124 Almajiri schools for children enrolled in Quranic schools who hitherto did not have opportunities for formal education. It is estimated that these schools would help draw 9 million children to the formal school system in the northern part of the country.

Table 2 displays data on student enrolment in junior and senior secondary schools. Except for 2008, female student enrolment was not higher than 46% in any of the years covered. The table masks the situation of girl-child education in the northern part of the country.

<table>
<thead>
<tr>
<th>Year</th>
<th>Junior Secondary Schools</th>
<th>% Female</th>
<th>Senior Secondary Schools</th>
<th>% Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>1,143,080</td>
<td>1,042,894</td>
<td>2,185,974</td>
<td>47.7</td>
</tr>
<tr>
<td>2000</td>
<td>1,264,903</td>
<td>1,012,388</td>
<td>2,277,291</td>
<td>44.5</td>
</tr>
<tr>
<td>2001</td>
<td>1,431,633</td>
<td>1,148,535</td>
<td>2,580,168</td>
<td>44.5</td>
</tr>
<tr>
<td>2002</td>
<td>1,746,909</td>
<td>1,203,828</td>
<td>2,950,737</td>
<td>40.8</td>
</tr>
<tr>
<td>2003</td>
<td>2,083,699</td>
<td>1,600,945</td>
<td>3,684,644</td>
<td>43.5</td>
</tr>
<tr>
<td>2004</td>
<td>1,972,637</td>
<td>1,535,291</td>
<td>3,507,928</td>
<td>43.8</td>
</tr>
<tr>
<td>2005</td>
<td>1,984,387</td>
<td>1,639,776</td>
<td>3,624,163</td>
<td>45.3</td>
</tr>
<tr>
<td>2006</td>
<td>1,653,753</td>
<td>1,281,219</td>
<td>2,934,972</td>
<td>43.7</td>
</tr>
<tr>
<td>2007</td>
<td>1,942,672</td>
<td>1,530,466</td>
<td>3,473,138</td>
<td>44.1</td>
</tr>
<tr>
<td>2008</td>
<td>2,150,037</td>
<td>1,784,024</td>
<td>3,934,061</td>
<td>45.4</td>
</tr>
<tr>
<td>2009</td>
<td>2,413,235</td>
<td>2,022,016</td>
<td>4,435,251</td>
<td>45.6</td>
</tr>
<tr>
<td>2010</td>
<td>2,703,938</td>
<td>2,306,289</td>
<td>5,010,227</td>
<td>46.0</td>
</tr>
</tbody>
</table>

Table 2: Secondary School Enrolment in Nigeria by Gender (1999 to 2010)


This view is corroborated by the 2005 Education Sector Analysis study report (Federal Ministry of Education, 2009), which indicated that the issue of girl-child education was still a problem to grapple with in the North. The condition has not changed at present.
Table 3 presents data on student enrolment at the tertiary level of education. It was only in colleges of education that the female participation rate was above 50% in most of the years covered. On the average, females constituted 39% of the student population in polytechnics, while the average female participation rate was 36.5% in the universities for the years that data were available. The Federal Ministry of Education (2009) reports that inequality in gender participation exists at this level of education and the female gender is at a disadvantage.

<table>
<thead>
<tr>
<th>Session</th>
<th>Colleges of Education Total</th>
<th>% Female</th>
<th>Polytechnics Total</th>
<th>% Female</th>
<th>Universities Total</th>
<th>% Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000/01</td>
<td>144,163</td>
<td>78,570</td>
<td>175,562</td>
<td>68,750</td>
<td>358,758</td>
<td>127,125</td>
</tr>
<tr>
<td>2001/02</td>
<td>238,442</td>
<td>123,315</td>
<td>285,093</td>
<td>117,020</td>
<td>444,949</td>
<td>170,818</td>
</tr>
<tr>
<td>2002/03</td>
<td>306,274</td>
<td>156,772</td>
<td>228,258</td>
<td>90,370</td>
<td>606,104</td>
<td>232,326</td>
</tr>
<tr>
<td>2003/04</td>
<td>337,206</td>
<td>180,964</td>
<td>311,102</td>
<td>126,435</td>
<td>727,408</td>
<td>234,534</td>
</tr>
<tr>
<td>2004/05</td>
<td>351,255</td>
<td>201,162</td>
<td>311,581</td>
<td>127,864</td>
<td>780,001</td>
<td>285,179</td>
</tr>
<tr>
<td>2005/06</td>
<td>290,318</td>
<td>148,272</td>
<td>214,391</td>
<td>88,799</td>
<td>765,522</td>
<td>-</td>
</tr>
<tr>
<td>2006/07</td>
<td>305,829</td>
<td>152,507</td>
<td>186,592</td>
<td>72,285</td>
<td>1,096,059</td>
<td>-</td>
</tr>
<tr>
<td>2007/08</td>
<td>315,426</td>
<td>157,796</td>
<td>169,373</td>
<td>63,672</td>
<td>661,493</td>
<td>232,783</td>
</tr>
<tr>
<td>2008/09</td>
<td>346,006</td>
<td>176,955</td>
<td>163,701</td>
<td>58,572</td>
<td>577,029</td>
<td>225,244</td>
</tr>
<tr>
<td>2009/10</td>
<td>-</td>
<td>-</td>
<td>166,121</td>
<td>63,741</td>
<td>605,068</td>
<td>232,287</td>
</tr>
</tbody>
</table>

**Note:** (1) means not available
(2) Figures for universities are for undergraduate students.

**Sources:**

**Challenges**

The Ouagadougou (Burkina Faso) Declaration and Frame Work for Action (UNESCO/UNICEF, 1993) on the education of girls observed that there were 26 million African girls that were out of school and that the figure would increase to 36 million in the year 2000; that Africa was lagging behind all regions of the world in female enrolment ratios and female literacy; that illiteracy rates for women was over 60%; that high population growth rate was impeding attempts at eradicating male/female disparity; and that there is the need to remove national
policies that hamper girls’ education and status of women. Noting the global recognition that has been given to the education of girls through the World Conference on Education for All (1990), Convention on the Rights of the Child (1989), etc., the Conference called on governments to give more priority to the education of girls. In spite of this laudable mandate given to African governments, Obanya (2004) observed that problems such as winning the support of the people, non-application of the laws on compulsory education, shortage of women teachers, extreme poverty, etc are still militating against basic education for girls and women in Africa. The World Education Forum held in Dakar in the year 2000 (UNESCO, 2002a) also reaffirmed the six goals set in Jomtien, Thailand in 1990, because the targets set at the Jomtien conference were not achieved by the year 2000.

It has been reported that 10.5 million children were out of school in Nigeria in 2013. Although the figure is not disaggregated by gender, reports have it that most of those children are girls. Moreover, data from the World Bank showed that 5,487,901 females and 5,054,204 males constituted the population of out-of-school children in Nigeria in 2010. It is common knowledge that female children hawk different commodities during school hours and child labor is still practiced in Nigeria. Such children are exposed to sexual abuse, resulting in teenage pregnancy. Such children eventually drop out of school. Because adult education programs are grossly inadequate, such young mothers hardly find it possible to go back to school when they so desire. The International Labour Organisation has warned Nigeria that it will not be classified as a developed country by 2020 if the practice of child labor is not tackled headlong. It seems that policy makers have forgotten that such hawkers have talents that can be exploited for national development. The activities of an insurgent group especially in the North Eastern part of the country have further worsened the situation. In some communities, school facilities were burnt down, pupils and teachers were killed, thus paralyzing school activities and denying girls and boys the chance to receive formal education.

The Federal Ministry of Education (2009) further attributes the problem of access at the basic education level to the non-existence of an open school system that can cater to those who leave primary school early and primary school leavers who cannot gain admission into junior secondary school. Other challenges are unequal access to quality education, socio-economic background of pupils, urban-rural dichotomy, to mention a few.
Moreover, early marriage among female children is common in the Moslem-dominated areas of the Northern part of Nigeria where children below age 18 years are given out in marriage, in spite of the provisions of the Child’s Right Act, 2003 and the Universal Basic Education Act, 2004 earlier mentioned. The argument in that part of the country is that Islam supports giving out a girl of any age in marriage and once a girl is married, she automatically becomes a full adult. This incidence of early marriage denies more female children than their male counterparts the opportunity for formal education at the basic education level. This partly explains the gender disparity in student enrolment in the senior secondary schools and tertiary institutions of learning in some areas of the country.

At the post-basic education level, the Federal Ministry of Education (2009) lists the obstacles to access as insufficient infrastructure and facilities, shortage of qualified and knowledgeable teachers, poor rewards for teachers, among others. The problem of access at this level also affects girls.

In spite of the fact that the Fourth World Conference on Women held in Beijing, China in 1995 (UNESCO, 1995) before the World Conference on Higher Education had observed that equality of access to educational opportunities is important if women are to serve as agents of change; that the high illiteracy rate which is common in the majority of the developing countries, with particular reference to sub-Saharan Africa and the Arab region is a major snag in bringing about progress of women and development; that creating a conducive educational and social environment where men and women, boys and girls, are given equal opportunity to achieve their full potential and where educational resources do not encourage a stereotyped image of men and women, will go a long way in eliminating discrimination against women and disparities between men and women; and its concern about unequal access to education between boys and girls, men and women.

Alani (2007) reported disparity between the number of male and female candidates that sought admission into Nigerian universities. Faculties of Engineering and Environmental Sciences were the least preferred by female candidates, while they showed significant preference for arts, humanities and social sciences. This explained the lowest percentage of female candidates eventually given admission into the Faculties of Engineering and Environmental Sciences. In addition, more male than female candidates applied for university admission in most States of the Federation. The female participation rate was below 30% in some States in the northern part of the country.
Considering student enrolment, Faculties of Engineering/Technology, Environmental Sciences and Veterinary Medicine had the lowest female student population. Those faculties also produced the lowest percentage of female graduates and an insignificant percentage of female students completed the doctorate degree in most faculties during the period under review. Alani (2002) also examined student enrolments in colleges of education and polytechnics. Available data showed that there were more males than females in those institutions. Okebukola (1998) also observed that male/female disparity is more pronounced in polytechnics than any other tertiary educational institution. This may be because polytechnics lays emphasis on science, technology, engineering and environmental design, which female candidates show the least preference for. In colleges of education, the differences in enrolment were slightly in favor of females. This may be due to the general perception that females are well disposed to teaching as a profession, especially at the primary and secondary school levels.


Not too long ago, the Federal Ministry of Education (2009) reports that the low carrying capacity of universities constrains admission into these institutions, while candidates show low inclination for admission into polytechnics and colleges of education. Not many candidates are interested in careers in vocational and technical
fields, or teaching because of the disrespect for the former and poor remuneration in the latter. The barriers facing Open and Distance Learning, and its underdevelopment in Nigeria have also hindered access to higher education by distance learning (Federal Ministry of Education, 2012).

The World Declaration on Higher Education for the Twenty-First Century adopted by the World Conference on Higher Education (UNESCO, 1998) noted that “equity of access to higher education should begin with the reinforcement and, if need be, the reordering of its link with all other levels of education, particularly with secondary education”. If girls are encouraged to receive universal junior secondary education like boys, then the male/female disparity in university education, which is evident in Nigeria, might be drastically reduced. The Conference also noted that socio-economic, cultural and political factors still hamper women’s access to higher education. The Conference pointed out that more efforts are needed to stamp out gender stereotyping in higher education, to increase women’s participation in disciplines in which they are not adequately represented, to promote gender studies in order to transform higher education, and to improve women’s participation in policy formulation and decision-making in higher education.

The Way Forward

Efforts at promoting the education of girls and women should start at the basic education level. There is the need to equalize access to quality basic education. The disparity between schools in rural and urban areas in terms of provision of resources – physical facilities, qualified teachers and materials – must be removed. It has been noted that primary schools in some states of the country are manned by poor quality teachers and there are reports that some teachers, including university graduates, failed a test meant for primary four pupils. Some teachers also failed a test on simple arithmetic and basic literacy. Schools in the rural areas are always worse off because the most qualified teachers prefer postings to the urban areas where there are municipal services. There is also the need for vocational education at this level where pupils who cannot cope with academic subjects can make use of their hands. If quality education is provided at this level, girls, who are more disadvantaged than boys, will be attracted to school because non-literate parents might think that non-functional education is a waste of time for their daughters.
The on-going project funded by the United Kingdom’s Department for International Development, DFID and managed by UNICEF to promote the education of the girl-child in Northern Nigeria should be actively supported by the state governments of Bauchi, Katsina, Niger, Sokoto and Zamfara, which are currently benefitting from the program. The program is designed to attract 1.15 million girls into basic education in an 8-year period: 2012 to 2020. The aim of the program is to reverse poor enrolment of girls in school, promote gender parity and equality, and enhance the quality of teaching in schools. It was reported that Phases 1 and 2 of the project were executed from 2005 to 2012, and that female enrolment in the five participating states increased by 488,000. The hitch is that the development partners have threatened to withdraw counterpart funding because of alleged lack of commitment on the part of the state governments. There is, therefore, the need for sustained funding for the program by the affected state governments. The project should also be replicated in other northern states, which have issues with girl-child education and are not captured yet.

Provision of school meal free of charge to parents/guardians can help to bolster enrolment at the primary school level. It has been reported that primary schools have been able to enroll 80% of school-age children in Osun State, Nigeria where one meal is provided in each school day for primary school children. Both boys and girls have benefitted from this enrolment drive through a meal per day program for school children.

An open school system, which is a component of the non-formal aspect of basic education, needs to be established. This will cater to those children who could not complete primary education and those female pupils who dropped out of primary school as a result of early marriage or teenage pregnancy. Such open school’s curriculum should be diversified to include technical and vocational education to make it relevant to the needs of the pupils.

Government must develop sufficient political will to sanction parents who withdraw their children from school contrary to the provisions of the Child’s Right Act, 2003 and the Universal Basic Education Act, 2004 which bar parents or guardians from withdrawing their children or wards from school before completing basic education. This law needs to be strictly applied particularly in the Moslem-dominated parts of the North where the incidence of girls’ withdrawal from school is still rampant. It is gratifying to note that two southern states (Ekiti and Ogun) have threatened to sanction parents who disallow their children from going
to school or who encourage their children to hawk during school hours. Another southern state (Delta) has set up what it calls ‘EduMarshals’ (25 Education Special Marshals and 100 Education Marshals) who will make sure that all school-age children attend school obligatorily. This type of commitment on the part of political leaders is needed in all states of the country, but especially the Moslem-dominated ones in the North, if one considers a report which indicated that low girl-child education is a national crisis (Vanguard online Tuesday October 15, 2013), although the worst affected States are in the North where Kebbi, Sokoto, Bauchi, Jigawa, Yobe, Zamfara, Katsina, and Gombe States had the lowest girl-child education and highest female illiteracy rates.

Women also need economic empowerment for them to play useful roles in the education of their children. Ana and Sudhir (2012) list some of the actions that can be taken to empower women economically. First, is giving women time to work outside the home so that they can earn income, as it is practiced in Colombia. Second, women’s access to credit can be expanded for them to finance economic activities as it is done in Bangladesh. Third, access to productive resources, for example land, can be guaranteed, as is the case in Ethiopia. Fourth, institutional biases against women can be removed. A quota system that favors women, for example, reserving a specific number of employment positions for women in the public service and government agencies, can be introduced in this regard. Government and relevant authorities have to enforce the provisions of international treaties and conventions, the Nigerian Constitution and other legal instruments that protect the economic and other rights of women.

More women should be encouraged to pursue careers in science and technological fields at the tertiary education level. For this to be realized there will be serious improvement in the teaching of science subjects at the secondary education level. The unhelpful beliefs among some teachers and guidance counselors that girls are low achievers in science and that careers in the sciences and technology are inappropriate for girls must be corrected (Harding, 1992). Furthermore, the problems of insufficient role models, that is, inadequate presence of women teachers in science and technology courses at the secondary and tertiary education levels; and school-based factors (such as non-functional curriculum, poor teaching-learning environments; unsuitable teaching methods; etc) identified by Erinosho (2001) as some of the challenges faced by girls in science education in Nigeria have to be tackled by the Science Teachers’ Association of Nigeria
(STAN) and ministries of education. Guidance counselors based in schools also have a critical task to perform in this direction too. Women professionals in science and technology-related fields will have to be invited to secondary schools to explain the prospects of careers in such fields to female students, draw the attention of girls to the incredible exploits of women in those fields around the world, and request female students to visit workplaces where women scientists are making waves.

The federal government should also discharge the pledge made at the Fourth World Conference on Women (UNESCO, 1995) on its willingness to establish a university for women. Nigeria needs to copy Philippines, India, Pakistan, Zimbabwe, Kenya and other developing nations that have set up universities for women. This may encourage more women to enroll in the university especially in the Moslem-dominated parts of the North where Islamic religion forbids free mixing of men and women. It has been noted that women-only universities have helped to bolster access of girls and women to higher education in India (UNESCO, 2002b). Nigeria can also reap huge advantages by establishing such a university.

Conclusion

This paper examined the importance of girls’ and women’s education in self and national development and stressed that it should be accorded the priority it deserves because of the large number of the female gender in Nigeria. The policies designed to promote the education of women folk, the state of their education, challenges militating against their education and the remedies for the challenges were discussed. Governments at all levels have to show sufficient political will to implement policies designed to promote the education of girls and women. One of the major problems of educational development in Nigeria is the gap between policy formulation and policy implementation. This has caused a lot of stress for the education sector. Governments have to commit resources to the education of the female gender in order to empower women for self and national development. This is an agenda that is being pursued by all progressive nations whose objective is to promote gender equality in the development process through formal education. Nigeria has to act decisively to reverse the ugly trends in its education sector if it is to be taken seriously among comity of nations.
References


A Comparative Study of Instruments Used in the Quality Assurance for Internationalization of Higher Education

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ABSTRACT

This paper will compare two instruments for quality assurance on the internationalization of higher education institutions: The Internationalization Quality Review Process (IQRP) and the International Education Quality Assurance System (IEQAS). Methodologies adopted were ethnography, hermeneutical phenomenology and the cross-cultural comparative approach. Findings show that IQRP was more comprehensive than IEQAS. Three domains -- the nature of the quality assurance, procedural aspect and rewards and sanctions -- were selected, contrasted, compared and analyzed. During the analysis of sanctions, a discernable concept, equity was derived from the IEQAS and an in-depth analysis was undertaken to reveal and interpret the nature of the meaning.

Keywords: Quality assurance, IQRP, IEQAS, Ethnography, Hermeneutical Phenomenology.

Introduction

Knight (2003:2) defines internationalization at the national, sector, and institutional levels as the process of integrating an international, intercultural, or global dimension into the purpose, functions or delivery of post-secondary education. A more focused definition is suggested by Rudzki (1995:421; recite from STINT 2012) that “internationalization of higher education can be understood as [...] a defining feature of all universities, encompassing organizational change, curriculum innovation, staff development and student mobility, for the purposes of achieving excellence in teaching and research.” Marmolezo (2012) describes the significance of internationalization for higher education such that “the internationalization enables universities to improve student preparedness, internationalize the curriculum, raise the international profile of the institution, enhance research and knowledge production and diversify its faculty and staff.”

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Drawing upon contemporary global development from student to government, internationalization is destined to follow unanimously. However, implementation of internationalization has not been preceded with recklessness, rather it underwent a change along with diverse mechanisms in the direction of quality assurance and quality protection.

Cheng (1995) defines education quality as “the character of the set of elements in the input, process, and output of the education system that provides services that completely satisfy both internal and external strategic constituencies by meeting their explicit and implicit expectations”. Cheng and Tam (1997) state, the “general conception of education quality has different meanings and has been defined variously as excellence, value, fitness for use, conformance to specifications, conformance to requirement, defect avoidance, meeting and/or exceeding customers’ expectations, etc.” Sachs (1994) condenses multiple views of quality into two broad types, namely: Quality assurance for accountability, characterized by external locus of control and associated with centralized administrative structures and external auditors measuring quantitative indicators of success; and quality assurance for improvement, characterized by an internal locus of control and associated with facilitative administrative structures which use peer review to assess more qualitative indicators of success.

Wende (1999) argues that demand for quality assurance has become considerable in the context of the growing internationalization of higher education. The dramatic rise in overseas student mobility over the last decades and the various forms of cross-border provision of contemporary higher education have raised concerns of quality standards, the prestige of cross-border higher education institutions has demanded a closer monitoring of cross-border education quality. Furthermore, OECD (2008; Peace and Campos 1997) indicates that the convergence of a higher education system like the Bologna Process in European countries is also driven by the globalization of professions and the impetus of some professional organizations to set common standards through global accreditation activities.

The general typology of quality assurance approach used to achieve the dual requirement of accountability and improvement (Sachs 1994) is categorized as audit, assessment and accreditation by an external body. Harman (1998) indicates the key methods of quality assurance of internationalization as “self-evaluation peer review by panels of experts; analysis of statistical information and performance of
indicators; survey of stakeholders, students, graduates, employers and other expert agencies; and test of students’ knowledge, skills and competency.” According to OECD (2008), “the majority of quality assurance agencies use a four-stage model which includes: [an] autonomous internal quality assurance system implemented independently; self-evaluation; external assessment by a peer-review group and site visit; and publication of an assessment report.” The European Network for Quality Assurance (ENQA 2005) signifies that these four-stage models are generally acknowledged as the common foundation of international practice and has an outstanding position in the higher education quality assurance standards and guidelines developed at European and international levels and adopted by the European Council. Several tools, namely, guidelines, self-evaluation reports, a code of practice, site visits, and surveys of students, recent graduates and/or employers, performance indicators and statistical data, were used to realize the effectiveness of quality assurance processes for substantial implementations of the above mentioned methods, although the scope of their use varies across countries. Although several labels such as strategy, model, way, approach, method, and tools, were used as ways of quality assurance and although the words on how to make quality assurance can be mixed and mingled together, the most fundamental and baseline language is seen as an “instrument” to substantiate the quality assurance, though it still remained as synonymous with other words. Hereinafter, the “instrument” is used as a main study subject in this report.

The assessment of the internationalization development has to comply with and be aligned with the core missions of the higher education institutions as well as the government. O’Neill and Palmer (2004) state that the quality has been defined as conforming to the requirements. However, Billing (2004) concludes that a general model of external quality assurance does not universally apply, but that most elements of it do apply in most countries. In each country, there may be specific additions of elements or omissions from the model. Given the above diverse perspectives, this paper aims to analyze and discuss the two instruments of assessing quality assurance of internationalization selected from Eastern and Western regions in the Northern Hemisphere: Internationalization Quality Review Process (IQRP) and International Education Quality Assurance System (IEQAS). The research questions in this study are: “How are the tools similar and different across cultures? Which theories hold across cultures and which do not?”
Methodology

This study is comprised of two stages. The first stage describes and introduces each model very briefly. The next stage compares the two instruments by contrasting them from the objectives to practical utilization by a cross-cultural perspective. According to Harzing, Reiche and Pudelko (2012), to determine which methodological issues are most relevant, it is crucial to characterize a given research project in terms of its approach to cross-cultural research. In this regard, Adler (1983) distinguishes between six orientations to investigate cross-cultural management issues – parochial, ethnocentric, polycentric, comparative, geocentric and synergistic research. Harzing, Reiche and Pudelko (2012) explain that the six approaches to cross-cultural research vary in terms of their methodological issues and thus require different measures to cope with the underlying research process. This study primarily adopts comparative research which studies contrasting foreign cultures. This approach aims to search for both the similarities and differences of instruments for quality assurance for internationalization of higher education institutions. Hence, the primary questions are “how are the instruments similar and different across cultures? Which theories hold across cultures and which do not?” Another method is the ethnographical approach. In this cultural study, the making and positioning of the contextualization technique (Fetterman 1989) was used to investigate a specific situation’s move into wider angles of foci. In this approach, insiders’ views (emic points) and outsiders’ views (etic points) were integrated to analyze and discuss the given cultural domain.

Samples and Participants

The Internationalization Quality Review Process (IQRP) was developed by the Institutional Management in Higher Education (IMHE) of Organization for Economic Co-operation and Development (OECD) and Academic Co-operation Association in Brussels (ACA) (OECD IMHE 1999). The International Education Quality Assurance System (IEQAS) (Ministry of Education, Ministry of Justice & National Research Foundation 2012) was developed by the Ministry of Education and Ministry of Justice, and National Research Foundation, Republic of Korea. These two instruments were compared in the context of cross cultural perspectives. The three rationales in selecting the two instruments are as follows: they contain
the significance elements, four-stage model, which were emphasized by OECD (2008) and ENQA (2005). In the light of the four-stage models (self-evaluation, external assessment, site visit and assessment report), the two instruments can be compared and analyzed. Secondly, the two instruments present their contents explicitly and publish their procedures and protocols for their open usage. Thirdly, the two instruments are effective for comparison and contrast by representing Western and Eastern culture orientation.

For the qualitative analysis, data from the documents and an interview was collected and analyzed, then used for the supplementary evidence and justifiable narration in interpreting and analyzing qualitative data.

Limitations

One of the weaknesses of this study is the incongruent aspect of the instruments. On face value, the instruments share the common trait as a kind of guideline. The two instruments are not perfectly identical from the birth, purpose and even incentives. But the two instruments were justified and accepted as samples because the equivalent issue is not directly related with the samples. The study is also not a survey or questionnaire. Instruments as samples do not necessarily need to be identical with each other even in cross-cultural studies. The same context of policies and governance in each managing country is not exact.

Analysis

Outline of the instruments

The points of similarity of the models are: the two models are designed and produced by the government and its affiliated institutions, though OECD is a kind of organization of the government; they are completed by pilot tests; they seek quality assurance of internationalization; they contain three stages of processing and a follow up stage; the users are public and private tertiary institutions; it describes prescriptive steps as a guideline; the decision of using them is at the tertiary institutions’ discretion; assessments are implemented by internal (self-assessment) and external evaluators independently; the reports are written by internal and external evaluators and the reports are classified as confidential. As comparative
samples, the above similar distinctions of the two instruments are viewed as having equivalency for the reliability of the comparative study.

The differences of the models are listed as follows: the IQRP is a process in itself, but the IEQAS is a recognition or certification system; the years of production of the IQRP are ten years earlier than the IEQAS; participation is at one’s discretion in IQRP, but evaluation is enforced in some areas by external evaluators in the case of IEQAS; the representative non-discretion area is an “illegal stay” of an overseas student in IEQAS; tertiary institutions, those which are violating the maximum ratio of illegal stays are imposed a sanction by prohibiting the recruitment of overseas students; IQRP is increasingly ensuring an internationalization quality through the phased processing, but IEQAS recognizes the effective tertiary institutions immediately through the absolute assessment and relative assessment; IQRP uses self-assessment as a promotion of the internationalization quality assurance, but IEQAS uses self-assessment as an elucidation of the process against failed indicators; the focus of IQRP is to assist quality assurance of internationalization mainly, but IEQAS is focused on the discernment which institutions are recognized or which institutions are not; the time frame of IQRP is 36 months from the start to the follow-up, but IEQAS takes six months and certification is renewed every single year; the follow-up stage in IQRP takes one year after finishing the external evaluation, but IEQAS decides on recognized institutions within six months after the external evaluation and reassessment is held every single year consecutively.

**The meaning of the quality assurance in the instruments**

A cultural domain is derived from a list of cover terms which is the outcome from the analysis of linguistic relations of studying the topic. For example, a linguistic relation of strict inclusion can be analyzed through the function analysis of “X is a kind of Y” (Spradley 1980). The meaning of quality assurance of the instruments can be identified by the repetition of this type of analysis. IQRP seeks the quality assurance of internationalization by assisting an institution’s own stated aims and objectives. Thus, the meaning of quality assurance is dependent of the extent to which institutions actually achieve the aims and objectives which they set for themselves. Substantially, IQRP seeks the integration of an international dimension into the teaching, research and service function to address the quality
issues. In the IQRP, the meaning of quality assurance is a degree of achievement in which institutions set stated aims and objectives for themselves. Accordingly, each institution’s autonomy, characteristics and diversity are respected and uniformity is rejected. The adoption and utilization of IQRP comes from intrinsic motivation of the institutions. Hence, active participation and activities are possible.

The purpose of IEQAS is to increase the number of overseas students. The meaning of quality assurance depends on the achievement of indicators which the government has set forth. IEQAS is implemented by three stages: relative quantitative assessment, absolute quantitative assessment and site visit. Each stage is executed by assessing indicators which are set forth by the government. In the first stage, relative quantitative assessment selects 70% of overall institutions by assessing eight quantitative indicators which are comprised of an internationalization infrastructure and recruiting management capacity. In the second stage, absolute assessment selects the certification candidate institutions which pass at least five of the six indicators. The third stage is a selection of certified institutions through site visit evaluation.

IEQAS is heteronomous and extrinsic motivation oriented, and it directs uniformity by assessing pre-structured indicators and centralized management. Also, as execution of IEQAS is based on legal basement, it is regulated by enforcement. Thus, passive participation and activities are expected by centering on the management of the indicators.

The quality assurance of internationalization is expressed in the second phase absolute quantitative assessment. Some significant examples are the indicators of drop out ratio and financial soundness. An indicator of the drop out ratio asks students to detail any qualified teaching and extra-curricular activities like tutorship and counselling for students’ effective learning outcome.

An indication of financial soundness demands that the average overseas students’ tuition fee must reach 80% and compare more favorably to the average domestic students’ tuition fee. The principle of recognition of quality assurance is based on whether the institution achieves fifteen indicators which are set forth by the government and site visit evaluation.
Procedural aspects of the instruments

The aspects of procedural analysis of both instruments are focused on the priority of the relative importance of the assessment subject, data and the timing of judgment on the quality assurance. IQRP has stages of self-assessment, external assessment (peer review) and a follow-up stage. It takes seven months to finish the self-assessment report and ten months to be ready to send the peer review report from the decision to start an IQRP. The site visit is held within eight months from the start. The follow-up report is ready in thirty-six months from the start. Thirty-six months is a comparatively long time to complete the one-time evaluation with a sufficient self-assessment and external evaluation but considering the period of an academic semester, thirty-six months are effective for a good outcome of quality assurance. Self-assessment is prioritized in IQRP as the most important stage. The qualitative data dominates the analysis. The self-assessment report includes: context, internationalization policies and strategies, organizational and support structures, academic programs and students, research and scholarly collaboration, human resources management, contracts and services, and conclusions and recommendations. The self-assessment report includes critical assessment and addresses ways to assure and improve the quality of internationalization of the teaching, research and public service functions of the institution in the light of existing issues and forthcoming challenges. The peer review assesses the institution’s self-assessment report on internationalization sufficiently analytical and constructively critical; the strengths and weaknesses of the institution’s international activities clearly articulated and the plans for improvements clearly presented and realistic; whether the institution achieving the aims and objectives it has set for itself; how the institution’s vision and goals relate to the development and sustainability of its international activities within the totality; and what action is required of the institution in order to monitor progress and provide continuing impetus. The importance of self-assessment is very high because peer review is processed to review, comments and advice by relying on the self-assessment. Promotion of quality assurance is formed during the entire assessment procedures, hence the norms of quality assurance by IQRP is subjectively framed by experiencing critical self-assessment on aims and objectives set by themselves, and peer review, diagnosis, advice and monitoring on the self-assessment. For these
reasons, IQRP is called a kind of process and the timing of identification of quality assurance is a step of the entire process because the quality assurance is a continually forming process. The limits and objectives of quality assurance are built in the institutions and extended and reduced any time if necessary in accordance with the institution’s capacity to operate creative and effective strategies. So the quality assurance is constructed continuously in the institutions. Therefore, the philosophy of constructivism and qualitative subjective norms are built in the process of the IQRP. The stages of IEQAS are composed of quantitative assessment, absolute quantitative assessment, self-assessment and the site visit. It takes one week for the quantitative assessment and absolute quantitative assessment and another week for the site visit. Six months is required for the final announcement of the assessment results. The difference of quantitative assessment and absolute quantitative assessment is as follows: the quantitative assessment evaluates eight indicators and selects 70% of the institutions among all the institutions; then the absolute quantitative assessment evaluates another six indicators to select candidates in which institutions must pass at least five indicators; finally, certifiable institutions are decided through a site visit evaluation. Thus, the shape of the quality assurance is located where the government has set forth.

A distinctive difference of IQRP and IEQAS is the utilization of the self-assessment. In IQRP, the self-assessment is a baseline of the entire evaluation process, but the self-assessment is supplementary in IEQAS because IEQAS uses self-assessment as an elucidation process against the failed indicators among the absolute quantitative indicators. External evaluators hear about this elucidation and if the elucidation is reasonable enough to explain why certain indicators have failed, then they can acknowledge the failed indicators as a conditional acceptance. In the end, self-assessment is a promotion process in IQRP, whereas it is a supplementary instrument for acquiring certification in IEQAS. The highest priority assessment in IEQAS are the absolute quantitative indicators. Most of data to be assessed in IEQAS is quantitative. Thus IEQAS is positivistic. IQRP assesses qualitative dominating data. For example, one of IQRP self-assessment questions is: “which collaborative agreements exist with foreign institutions/research centers/private companies for research? How effective are these? In the case of IEQAS’s absolute quantitative data, it is prescribed as: to pass the indicator of drop out ratio, it must be kept under 6%. In IEQAS, the timing of identification of
quality assurance is the time of conferment of certification. By the judgement of pass and fail, institutions passed are given certification and quality assurance is recognized by the authority and the rest of the institutions are all failed in terms of the quality assurance.

**Analysis on rewards and sanctions**

The outstanding feature of the two instruments is the aspects of rewards and sanctions. This study adopts the approaches of ethnography and hermeneutical phenomenology to analyze rewards and sanctions in which a researcher relates with the existence to analyze, interpret and reveal the meaning of a targeted existence by getting an actual experience.

Although IEQAS is a system which issues authorized certification for quality control, it is problematic in its universality and generality. IEQAS is only usable in Korea for its specific prescription characteristics and guidelines which are included in rewards and sanctions. Whereas IQRP has a potential power for universality and generality due to its idealistic time line, quality formation stages, assistance by internal and external assessment and the ability to induce individual intrinsic motivation. For IQRP users, there is no explicit announcement of rewards and sanctions but it seems that there are implicit rewards and sanctions. This is evidenced from the pilot test outcomes. Six universities were pilot tested by IQRP (during its developmental stages) and all validated IQRP as useful and promising for their institutions’ promotion. The satisfaction may be the rewards and un-satisfaction may be sanction. For IEQAS users, there is an explicit announcement of rewards and sanctions. Rewards allow governments financial incentives and other incentives for internationalization affairs by diplomatic assistance and other public relations support. Sanctions are imposed for those institutions that could not keep one of the absolute indicators: 1 percent or more of illegal stay students. The sanction forces the institution to stop overseas student recruiting.

A combined view of insiders and outsiders removes the current narrow focus into a wider focus. To capture the emic view, researchers often begin by asking people open-ended questions about how things work from their perspective. This allows an individual to frame the concept, idea, or situation and then elaborate on
it. This provides a more accurate depiction of the individual’s mental map or cultural understanding.

The following question was asked:

Q: Why did you incorporate sanction in the IEQAS?

R1 (insider): We found that incoming overseas students have been decreasing for three consecutive years. If we continue this pattern, we will fail in internationalization in terms of student mobility. We believe that the reason for the decrease is a sign of failure of quality assurance of internationalization of higher education institutions. We expect the increase of overseas students only if we improve the quality assurance of internationalization. This is why we took action quality assurance affairs through IEQAS. The strong evidence of low quality assurance of internationalization is illegal employment and illegal stay of some overseas students in the domestic universities. If we improve this indicator, including other indicators, then we are certain that the quality of internationalization for higher education institutions could be assured.

An external view (etic) through more concrete social scientific opinion is collected to combine this with the insider’s view (emic).

Q1: Do you think that the current profile of overseas student recruiting represents a failure?

R2 (outsider): I don’t think that it has failed. Please refer to Table 1. By setting 2004 as a year of standards, if we increase the ratio each year, the ratio of out-bounding and in-bounding (outbound/inbound) is 11.2 times in 2004, but 2.6 times in 2014. This presents a dramatic increase of the inbounding numbers.

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<tr>
<td>Inbound</td>
<td>16,832</td>
<td>22,526</td>
<td>32,557</td>
<td>49,270</td>
<td>63,952</td>
<td>75,850</td>
<td>83,842</td>
<td>89,537</td>
<td>86,878</td>
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<td>Increase rate</td>
<td>33.8</td>
<td>93.4</td>
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<td>279.9</td>
<td>350.6</td>
<td>398.1</td>
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<td>416.1</td>
<td>410.1</td>
<td>404.3</td>
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<tr>
<td>Outbound</td>
<td>187,683</td>
<td>192,254</td>
<td>190,364</td>
<td>217,959</td>
<td>216,867</td>
<td>240,949</td>
<td>251,887</td>
<td>262,465</td>
<td>239,123</td>
<td>227,126</td>
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<td>Increase rate</td>
<td>-</td>
<td>2.4</td>
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<td>39.8</td>
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<td>21.0</td>
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Sources: www.moe.go.kr.

Q2: Do you agree that the illegal stay is the most important indicator to be promoted to assure quality of internationalization?
R2: I agree with the point that the indicator should be promoted, but it is not the fundamental one. Rather we need to give our attention on the other aspects. If we look at the objective statistics of Korea. In 1945, there were only 19 institutions of higher learning. Sixty years later, in 2007, the number of institutions of higher learning increased to 408. If we compare the number of universities to the UK and Canada as similar countries in terms of GDP, the number of universities in Korea is double that of the UK and 3.5 times that of Canada. The huge numbers of universities were established in Korea in the name of equity to satisfy the education fever of Koreans. But now school age students are decreasing dramatically. It is estimated that the school age students are decreasing from 682,000 in the year 2010 to 493,000 in the year of 2020. The accommodation capacity of current universities in Korea is approximately 600,000. Most of the recruited overseas students of lower quality tend to violate the law by leaving the institutions and getting a job. These inappropriate and repeated actions result from allowing huge numbers of universities in the name of satisfaction of education fever, expansion of education opportunity, equity of education and popularization of higher education. The problem is equity; this is not a normal equity, but an overdosed equity, though quite a subjective judgment.

Nature of the equity in relation to the sanctions in IEQAS

In a way, the IEQAS adopted approach is a fast-track to achieve specific objectives by using rewards and sanctions. But it is indicated that the fundamental problem is an issue of equity as we indicated above. Koreans seemingly have an exceptional ability in shrinking the gap between objectives and results. The distinctive evidence can be identified from the empirical data that universalization of tertiary education took 60 years to allow the equal opportunity in education (Lee 2008). The entrance rate of higher education reached 83.8% in 2008.

Here, the following question must be raised: What is the meaning of the equity that is derived from the study of sanction in IEQAS?”

The phenomenological approach was adopted to identify the nature of the equity. Phenomenology is essentially the study of lived experience or the life world (van Manen, 1997). Its emphasis is on the world as lived by a person, not the world or reality as something separate from the person (Valle, King and Halling 1989). This inquiry asks, “What is this experience like?” as it attempts to unfold
meanings as they are lived in everyday existence (Laverty 2003). Laverty (2003) explains that Husserl (1970) proposed that one needed to bracket out the outer world as well as individual biases in order to completely achieve contact with the essences. This is a process of suspending one’s judgments or bracketing particular beliefs about the phenomena in order to see it clearly. Koch (1995) outlined Heidegger’s emphasis on the historicity of understanding as one’s background or situatedness in the world. Historicity, a person’s history or background, includes what a culture gives a person from birth and is handed down, presenting ways of understanding the world. Through this understanding, one determines what is “real”. Yet, Heidegger also believed that one’s background cannot be made completely explicit. Munhall (1989) described Heidegger as having a view of people and the world as indissolubly related in cultural, in social and in historical contexts. Further in his hermeneutical circle, it consists in the rule that “the whole can be understood only through its parts, but the parts can be understood only through the whole (Vollmer 2000). Motahari (2007) assert that “contrary to what is commonly suggested -- that there is at the very least an apparent circle in so-called part-whole circle -- there is no circle at all when it comes to understanding the part and the whole of a sentence. Rather (...) a progressiveness in the process of our understanding.”

“Overdose of equity” is seemingly suitable language representing for the current situation in relation to the sanction which is used in IEQAS. In the Heidegger hermeneutical circle, the fore structure of the overdose of equity is a recurrence of discrimination. The discrimination is a very severe one. Looking back to the Japan colonization period from 1919 to 1948, discrimination replaced equity in education affairs. If we look back 500 years to the Lee dynasty in Korea, unrecognized discrimination was habitual because people were classified “the lowly and the eminence” automatically from birth. We can postulate that the discrimination accumulated again and again in peoples’ sub-consciousness. As Korea became free from Japanese colonization and adopted democracy, the need of equity was explosive. The meaning of fore structure of current equity is given as “discrimination and repression”. This interpretation could be framed through transcendental interpretation. Kakkori (2009) states that “however, for Husserl, phenomenological reduction is the approach of leading phenomenological vision from the natural attitude of human beings back to the transcendental life of
According to Heidegger, “Phenomenological reduction means leading phenomenological vision back from the apprehension of being … to the understanding of the being of this being” (Heidegger 1988:1). Heidegger’s key discussion is that the question of being has either been forgotten altogether or changed into the question of being as an entity. Being (Sein) is always the being of beings (Seiende), and Heidegger sees the accession to Being only possible through some beings. For Heidegger, the phenomenological reduction is this transition from beings to Being. The other two components of the phenomenological method is, construction and deconstruction which serve the question of being in their own way (Heidegger 1988:21-23; Kokoris 2009). In applying the Heidegger approach, the first deconstruction leads us from equity into discrimination. This is possible as our existential epistemology uses our historical experience and record to understand the fore structure of equity as discrimination. This is impossible if we are included in Husserlian’s bracketing approach. Now we need another back and forward in the hermeneutical circle to reveal the essence of the meaning of equity.

Two key experiences are laid out in front of us. The first one is a record on the peoples’ living around 2333-238 BC that: “the government had a policy on conscription, public appeal system to help a dejected people and allowing nations political rights to agree with the king ...(Darman 2015).” The national idea (ideology) at that time was Hong-ik-in-ghan (HIIG, 弘益人間) and is generally interpreted as meaning “the worthy human who pursues a worthy life for others (Kim 2006)”. The second is that the idea of Hong-ik-in-ghan (HIIG, 弘益人間) was adopted in 1948 when Korea was established as a democratic republic country. At that time, Korea was very poor -- having only USD90 in GNI per capita.

From the first record, the concepts such as conscription, public appeal system and allowing political rights for common people let us know that there had already existed an equity in living condition. Now, our interpretation moves from equity (present)-discrimination (500 years ago)-equity (2333-238 BC) by following the hermeneutic circle.

From the adoption of HIIG in 1948, we came to know that the national ideology of the ancient era (2333-238BC) was adopted again in the modern era (1948) though Korea was not in a position to give something because the country’s
GNI was only USD90 per capita at that time. Eventually the present and the origination of the ancient nation were connected in one idea: Hong-ik-in-ghan (HIIG, 弘益人間), meaning the worthy human who pursues a worthy life for others. Then Hong-ik-in-ghan (HIIG, 弘益人間) became a new meaning of equity.

As we circulate the fore structure of being, at last we returned to the starting point. But actually this is not the same starting point, but rather a recovery because we are living in a different era. Now if equity has a transitional meaning of a recovery, what is the nature of sanction and IEQAS that is aiming to correct the illegal stay problem which was instigated from equity?

**Nature of the equity**

The equity is a relative concept that is captured from the degree of discrimination between me and others. But HIIG is a concept of inclusiveness which I and others are interring into the happiness together. HIIG is seemingly placed on a higher plane than equity. But it is still in need of something because HIIG is regarded as objective so it cannot match with the sanction which is a functional instrument. We need to find concepts of instrumental words to equate with objectives. Affection, love, contribution and care are the kinds of concepts that can be used. After a great deal of thought, I came to reach the neutral meaning: recovery. This can be a suitable word because equity (or HIIG) was there already, and we are approaching it to be recovered. So the sanction’s inherent meaning could be interpreted as a recovery.

In a similar vein, IQRP reflects the spirit of Europeans. This instrument utilizes the modern democratic process, assistance and encouragement, capacity building and promotion of responsibility and accountability. It is considered that the meaning of recovery can be connected with confidence. Recovery means getting back power and strength. Confidence depends on the strong power in general. The nature of equity is interpreted as a recovery that is linked with confidence.
Discussion

The nature of the meaning of quality assurance

IQRP sees the nature of quality assurance as whether to achieve the aims and objectives that institutions have set by themselves. Hence, the strength of IQRP is highly potential of contextualization of local and international aspects including the pursuit of diverse and creative ideas for the purpose of quality assurance. But it seems difficult to expect the promotion of a specific problem nationally and suggesting alternatives quickly. The quality assurance in IEQAS is a matter of the institutions’ conformity with a government’s uniform indicators.

Thus the weakness of IEQAS is that institutions that are evaluated may have a negative reaction to IEQAS, but the suggested problems are presented as indicators that may be promoted quickly around the nation. Regarding those indicators that are related to the quality assurance, IEQAS is explicitly engaged in the economic perspective; it is distinctive that the government will not allow double deficit in the income and expenditure of education trade. Although both IQRP and IEQAS have become a gateway to enter quality assurance, IQRP is a gateway toward the world of institutions’ subjective norm and also being a gateway that opens to whichever institutions want to enter.

However, IEQAS is a gateway for the institutions that can enter by passing the indicators that are the objective uniform norm provided by the government. If one institution gets the certification of quality assurance, they can easily access government financial support and other incentives. These incentives attract institutions’ competitive involvement, then, the intended quality assurance can be achieved in a short time. Thus, we can learn that IEQAS contains a concept of globalization if we consider the concepts of profit and competition. Van Vught, van der Wende and Westerheijden (2002:17) note that “in terms of both practice and perceptions, internationalization is closer to the well-established tradition of international cooperation and mobility and to the core values of quality and excellence, whereas globalization refers more to competition, pushing the concept of higher education as a tradable commodity and challenging the concept of higher education as a public good.” As with the views of Brandenburg and De Wit (2011), IEQAS shows a tendency of infusion of globalization into the quality.
assurance of internationalization. Conventionally, internationalization and globalization are regarded as concepts independent of each other, but IEQAS tells us that internationalization and globalization must go together explicitly. However, it seems that the regime which created the IEQAS is explicitly performance-oriented and exhibitive. This manifested itself in the point that the performance-oriented and exhibitive policy may harm rather than promote quality assurance. This is because quality assurance is a kind of promise to keep certain standards for clients instead of winning them over. An inference is needed to identify why the regime which created IEQAS emphasized performance. The answer is related to the single-term system for the presidency. The Republic of Korea has had the single-term system for the presidency since 1988. Since the ROK has the single-term system for the presidency, it is highly probable that the government is involved in short-term and exhibitive policy implementation. For this reason, there are few countries adopting this system. The single-term system for the presidency is a result of a prolonged one-regime rule induced by a centralized regime, thereby losing social reliance of the nation. In conclusion, there is a theoretical problematized inference in which a heteronomous and indicator-centered IEQAS is a product of a lack of reliance for the regime. Another possible inference is the notion that if we want to have a truly sustainable long-term quality assurance, it should realize a regime that is believed to have a strong reliance by nations.

**Procedural aspects**

In IQRP, the most important element is self-assessment and qualitative data. This dominates in the assessment. The time of identification of quality assurance is the entire process of the IQRP. Therefore, the procedural implication of IQRP is a formative and the shape of quality assurance is built inside the institutions. In IEQAS, the most important element is absolute quantitative assessment and quantitative data dominates in the assessment. The time of identification of quality assured institutions is the time of conferment of certification for quality assured institutions. Therefore, the procedural implication of IEQAS is a deterministic and the typology of quality assurance is built outside of the institutions. The conjectural assumption from the procedural contrast of the two instruments is that the quality assurance can be achieved through the different epistemological approaches. The different epistemological approaches mean that the use of qualitative data and
quantitative data, self-assessment and external assessment, formative and deterministic setting of assessment elements. From this assumption, if we reveal the meaning of the procedural strategy, it can be contrasted by IQRP as an autonomous prescription and IEQAS as a heteronomous prescription. For quality assurance, it is reasoned that common theories holding across cultures is “with reversed approaches as can be found in IQRP and IEQAS, one can reach the quality assurance of internationalization.” However, it is also possible that the two instruments do not hold across cultures since the “autonomous approach does not show limitations [about] how much it could be developed” but, “a heteronomous approach shows limitations evidently which [are] described by numbers and indicators.” A formative approach like IQRP is a sustainable and limitless process to some extent in the promotion of quality assurance though individual institutions’ efforts are required continuously, but a deterministic approach like IEQAS does not suggest what to do and what further objectives for advancement are possible after being certified. So there is a need to suggest what the next step to further advancement for the future in IEQAS is. This means that IEQAS needs to equip the technical methods on “how to do it, what to do and why to do it rather than only achieving the indicators that the government set forth. IQRP is highly generalized in the instruments.

Rewards and sanctions

Rewards are needed to provide institutions incentives for good performance and stimulate cultures of quality. Sanctions for poor performance are needed to protect stakeholders.

Rewards and sanctions in IQRP are smoothly applied and implicitly spread in the instrument. IEQAS is deterministic by adopting explicit announcement of rewards and sanctions. Although the two instruments contrasted in the point that the way to rewards and sanctions are different, the final objective of the quality assurance of internationalization are the common attributes inherent in the two instruments. In the use of the instruments, IQRP is open to whichever institutions want to use it, and all tertiary institutions in Korea must participate in IEQAS. In both cases, the instruments have become a gateway that gives and imposes the rewards and sanctions. In addition, equity, a theme derived from the sanction
analysis in IEQAS was interpreted as discrimination-HIIG and it eventually penetrated the long history and was stamped and remained in Korean peoples’ minds until recently. In the light of Hegel’s dialectic perspective, current overdose of equity in Korean education in general might be transitory phenomena because the long history proves that the equity was experiencing dialectic changes.

**Conclusion**

This study seeks to compare the two instruments for quality assurance: IQRP and IEQAS. The two instruments were introduced and filtered to see how much comprehensiveness is reflected in the instruments. IQRP was more comprehensive than IEQAS. Three domains were selected, analyzed and discussed for the comparative study. They are the nature of the quality assurance, procedural aspect and rewards and sanctions.

The nature of quality assurance was a degree of achievement in which institutions’ set stated aims and objectives for them in IQRP, and was a degree of achievement which the government set forth in IEQAS. Two instruments are a gateway that opened all tertiary institutions to enter the quality assurance in IQRP but a gateway for only successful institutions in IEQAS. Ideas of globalization such as balance of payment and expenditure in education trade, and competitiveness were infused in IEQAS but not in IQRP. Analysis of the procedural perspective quality assurance process showed the existence of a different epistemological approach in the instruments. It was seen as formative, autonomous and sustainable in IQRP and deterministic, heteronomous and discontinuity in IEQAS. In this regard, IQRP shows a high potential of generalization in its utility. In the analysis of rewards and sanctions, points of contrast were presented as implicit and explicit. Regarding the sanctions in IEQAS, it was identified that the reason of sanction was an overdose of equity, and the equity was dialectically changed; equity-discrimination-equity-HIIG-recovery, by tracing through the hermeneutical circle. At last, it revealed the meaning of sanction as recovery with confidence through the windows of hermeneutical phenomenology. It is suggested that the combined model of IQRP and IEQAS may allow a more holistic approach for the quality assurance of internationalization for higher education institutions.
References


The Acceleration of Students Mastery on Standard Competence and Basic Competence by Utilizing BABE DENA (The Simple Natural Substance and Used Material)

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Background

Chemistry as a subject matter is not attractive to students as its concepts seem unreal and complex. This drives the teaching and learning process to be a teacher-centered one; thus students become passive and bored. For this reason chemistry needs to be taught in different ways to replace the conventional teaching process. Inquiry model is considered one way to make chemistry understandable. Bruner stated in Dahar and Shrie Laksmi (2004) that the application of inquiry model will benefit the students. Firstly, it will increase students’ intelligence potential because students have the opportunity to seek and invent the regularity and things related to it through research framework and their learning experience. Secondly, as students successfully conduct their research, they will intrinsically be able to make intelligent decisions. Thirdly, Students will learn how to invent through the process of invention and inquiry learning will give students long term memory.

The inquiry model can be applied through the lab work method. Unfortunately, the method is relatively costly. However, this can be overcomed by utilizing the simple natural substance and used material. (BABE DENA)

The equalization stage of simple natural and used material to laboratory practical work tools and instruments and materials.

As it is stated in the national curriculum, Chemistry consists of 16 basic competencies and not all of them can be conducted and mastered through the

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utilization of the simple natural substance and used material. (BABE DENA). Based on that reality, the teacher should identify the Standard of Competence and Basic Competence that can be mastered through lab work method, then identify the costly practical work material to be substituted by simple natural material that can be found in the students’ surrounding environment as well as identifying the costly practical work tools and instruments to be substituted by used materials. The table shows examples of them.

<table>
<thead>
<tr>
<th>No</th>
<th>Used Material</th>
<th>Lab Work</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Tea solution, distillation</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>camphor, salt</td>
<td>Recrystallization</td>
</tr>
<tr>
<td>3</td>
<td>felt-tip marker, whatman paper</td>
<td>chromatography</td>
</tr>
<tr>
<td>4</td>
<td>paraffin and palm leaf rid</td>
<td>chemical bonding and hydrocarbon</td>
</tr>
<tr>
<td>5</td>
<td>vinegar, water soap, children soft drink</td>
<td>solution</td>
</tr>
<tr>
<td>6</td>
<td>ice and salt</td>
<td>Freezing Point</td>
</tr>
<tr>
<td>7</td>
<td>PCB and FeCl3</td>
<td>Redox Reaction</td>
</tr>
<tr>
<td>8</td>
<td>curcuma, colourful flowers, Brassica Oleracea</td>
<td>Indicator pH</td>
</tr>
<tr>
<td>9</td>
<td>Soda Kue, vinegar</td>
<td>Reaction Rate</td>
</tr>
<tr>
<td>10</td>
<td>Betadine</td>
<td>identification of sacharida</td>
</tr>
<tr>
<td>11</td>
<td>Used mineral water bottle</td>
<td>Erlenmeyer</td>
</tr>
<tr>
<td>12</td>
<td>Used mineral water glass</td>
<td>Beaker Glass, test tube</td>
</tr>
<tr>
<td>13</td>
<td>Used disposable injection</td>
<td>Biuret</td>
</tr>
</tbody>
</table>

The following figures portray the implementation strategy of BABE DENA utilization in Chemistry class in SMKN 1 Cimahi that consists of several teaching and learning phases as follow:

*Figure 1: Discussion*  
*Figure 2: Facts finding*
The Acceleration of Students Mastery on Standard Competence and Basic Competence by Utilizing BABE DENA

Results

a. The abstract concepts become real ones because they are taught through lab work method. This enables students to see the process directly.
b. The method makes the learning become economical since it utilizes tools and materials available in students’ surroundings.

d. The shift of Teacher-Centered learning to Students-Centered learning
e. The shift of Dull learning to active, innovative, creative, effective and joyful learning
f. The improvement of students’ collaborative skill
g. The improvement of students’ ability to draw conclusions

Table 1: The price comparison of lab work material substances and tools to their substitutions

<table>
<thead>
<tr>
<th>No</th>
<th>Substance</th>
<th>Price</th>
<th>Substitution</th>
<th>price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Orange Metil</td>
<td>Rp 1.705,000/25 gr</td>
<td>curcuma</td>
<td>Rp 1.000</td>
</tr>
<tr>
<td>2</td>
<td>Red Metil</td>
<td>Rp. 805.000/50 gr</td>
<td>Colourful flowers</td>
<td>Free</td>
</tr>
<tr>
<td>3</td>
<td>Blue Metil</td>
<td>Rp 50.000/100 gr</td>
<td>Brassica Oleracea</td>
<td>5000/each</td>
</tr>
<tr>
<td>4</td>
<td>Ca(OH)2</td>
<td>Rp 270.000/100 gr</td>
<td>egg husk, chalk</td>
<td>Free</td>
</tr>
<tr>
<td>5</td>
<td>Sulphuric Acid</td>
<td>Rp 270.000</td>
<td>Accu Solution</td>
<td>Rp 2.800</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>vinegar</td>
<td>Rp 2.200</td>
</tr>
<tr>
<td>6</td>
<td>Test Tube</td>
<td>Rp 60.000</td>
<td>Used mineral water glass</td>
<td>Free</td>
</tr>
<tr>
<td>7</td>
<td>Erlemeyer</td>
<td>Rp 45.000</td>
<td>Used mineral bottle</td>
<td>Free</td>
</tr>
</tbody>
</table>
e. The improvement of students’ ability to communicate the results of their lab work
f. The improvement of student ability in using ICT
g. The students’ awareness of laboratory room cleanliness

**Conclusions**

Acceleration of Standard Competence and Basic Competence Mastery of 80% Minimum Standard Requirement Score.

After the implementation of inquiry model and lab work method utilizing BABE DENA, the evaluation showed the significant mastery of Standard Competence and Basic Competence as student scores increase to 80% of Minimum Standard Requirement Score.
Graphic 1: The Comparison of Mastery Score

Year of 2007

Year of 2013
**Purposes and Goals of APCJ**

As an academic journal published, APCJ (Asia-Pacific Collaborative education Journal, Print ISSN 2092-674X, Online ISSN 2092-6758) serves as an international forum to gather, refine, and share knowledge and experiences in order to help narrow the digital divide among APEC economies by Institute of APEC Collaborative Education since 2005.

Subsidiary goals include:

- To stimulate scholarly work in collaborative education, giving scholars incentives to conduct research and report findings
- To foster communication between academics and practitioners
- To share knowledge about national plans and policies regarding collaborative education

Even though started from APEC, now it has been promoting its aims and scope to other countries in the world and more various contents about education. Featuring international education, education cooperation among various countries, sectors, fields and themes, the Journal encourages the submission of manuscripts from around the world, and from a wide range of authors in various fields relevant to education. The Journal audience includes international and domestic students, teachers, faculty, administrators, and educators engaged in research and practice.
Who Publishes APCJ?

Umbrella organization:
The Consortium for APEC Cyber Education Cooperation (ACEC)

Apec, the Asia-Pacific Economic Cooperation, was established in 1989 to enhance economic growth and prosperity for the region and to strengthen the Asia-Pacific community. Under the auspices of APEC Education Foundation (AEF), ACEC was established in 2001 as a consortium of education agencies from Korea (IACE), Hong Kong China (Hong Kong University), New Zealand (COT), and the United States (USED) with the purpose of enhancing the educational efforts of APEC, particularly concerning reducing the digital divide with use of information and communication technologies (ICT). In 2002, teams from China, Chinese Taipei, Malaysia and Thailand joined ACEC. In the past three years ACEC has conducted a range of activities in APEC:

- research on and innovations in teaching and learning with technology
- Dispatching international internet volunteers to schools
- Publishing Webzine in several languages focused on using ICT.
- Conducting e-leadership workshops
- Creating on-line community software
- Managing Knowledge Bank of Education Policy and Practice web portal
- Constructing APEC Learning Community Builders

Publisher:
Institute of APEC Collaborative Education (IACE)
http://www.alcob.org

IACE was established in 2002 by the Ministry of Education of the Republic of Korea to promote the work of ACEC and to conduct Korean APEC projects. IACE supports the secretariat of ACEC and provides leadership for several ACEC initiatives, particularly ALCom-the APEC Learning Community for Shared Prosperity (http://www.alcob.org). IACE also supports a variety of international research and cooperation activities, including the Asia-Pacific Collaborative Education journal.
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1. Themes:
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   - International cooperation development in education
   - Cross-cultural or global education
   - Education cooperation with the use of technology
   - Digital divide
   - Collaborative/Cooperative education
   - Comparative education
   - Future education
   - Theory & Practice about education
   - Educational leadership
   - Any issues which elaborate educational cooperation

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   - Completed (interdisciplinary) research papers related to issues and concerns of international education, education development, educational technology, policy research, issues in global education and so on.
   - Articles should include a brief introduction of the issue or question, literature review, methods, results, brief discussion, up to two figures/tables, and maximum 5-8 references.
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- Length no less than 5 pages

3. **Submission due: open year-round**
- Publication Schedule: 31 July, 31 December
- Manuscripts undergo a blind review process involving a panel of three reviewers with initial outcomes usually provided within two months.
- No author submission or acceptance fee

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5. **Contact:**
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