Acceptability Of 3es Module Writing Model in Higher Education Institution

Researcher: **Liza Marie M. Manoos,**PhD
Associate Professor V
Marinduque State College

ABSTRACT

Due to the global health crisis, educational needs and solutions have received attention in academic institutions. With this, Marinduque State College developed the 3Es (Elicit, Explain and Evaluate) Module Writing Model to be used in flexible learning modality. This research aims to determine the acceptability of the instructional material. Specifically, it aims to identify the number of faculty that uses the model; determine the usual parts included in each section; identify the different forms where the model is being used; determine its acceptability in terms of adaptability, structure, usability, and perceived effectiveness; identify any recommendations and comments from the faculty that can improve the model; and ascertain significant agreement among the evaluators. The researcher used a quantitative-descriptive approach through the use of a validated questionnaire given to faculty members of Marinduque State College during the Midyear of academic year 2022. It was found out that the model is used by all respondents but how it is used depends on the course being taught. The objectives of the lesson are frequently included in the elicit section of the instructional material. Discussion of the subject, along with practice exercises and activities, can be found in the explain section. Assessment and reinforcing activities are typically included in the evaluate section. The instructional paradigm was discovered to be used in online learning resources and for presentation reasons. In terms of adaptability, structure, usability, and perceived efficacy, the 3Es Instructional Model was determined to be acceptable in all forms (Elicit, Explain, and Evaluate portions). It was suggested that the concept be adopted and modified for technical and skilloriented courses. The model's qualities have moderate agreement among the evaluators.

Keywords: 3Es Module Writing Model, Blended Learning, Instruction Model

Introduction

The COVID-19 Pandemic presents a classic adaptive and transformative issue for educators, one for which there is no preloaded playbook that may serve as a guide for effective answers. As the pandemic progresses, leaders in education must quickly develop solutions while keeping particular settings in mind. Emerging educational requirements and solutions have been highlighted in various academic institutions around the globe. (Reimers, Schleicher, Saavedra, & Tuominen, 2021)

The Commission on Higher Education in the Philippines published Memorandum No. 4, Series of 2020, requiring Higher Education Institutions (HEIs) to use blended learning system. In this sense, synchronous, asynchronous, and modular learning modalities are all included. Because of this, the faculties of various HEIs develop their course materials. (Commission on Higher Education, 2019)

Aligned to this, in Marinduque State College through the Office of Academic Affairs initiated a college wide training for the faculty in developing materials for instructions adaptable to various modalities and course orientations. The said training aims to implement the developed 3Es Module Writing Model by Manoos in 2020.

The said Module Writing Model was copyrighted under 2022-01326-0-TCCR last May 2022 (Philippines Patent No. 2022-01326-0-TCCR, 2022). As a result of the aforementioned training, members of the faculty of Marinduque State College were able to come up with instructional materials that were used in flexible learning.

As discussed by Espique in 2020, instructional materials for blended learning should be adaptable to various learning platforms especially to online learning platforms putting into consideration the existing pedagogical foundations. It must contain self-paced learning contents such as graphic organizers, objectives and appropriate assessments.

Further, these concepts were also discussed by Lim-Borabo (2015). In correspondence type of learning, innovation on teaching strategy must be adaptable to various learning schemes and classroom management, effective for the learners, concise in structure and usable in various topics. These parameters were considered in the 3Es Module Writing Model.

Three main sections for instructional material are introduced in the 3Es (Elicit, Explain, Evaluate) model, a module writing guide. The learning objectives, a review of prior information, and optional pre-assessment exercises are all provided in the Elicit section. The material's content is covered in the Explain section. This section offers examples and non-linguistic representations. The learners' assessment and learning-reinforcement activities are provided in the Evaluate section.

The model was created to offer a brief and understandable framework for creating instructional materials that may be used for blended learning programs and as an identity for MSC. (Manoos, Elicit, Explain, Evaluate: Module Writing Model, 2022)

Manoos (2022), discussed that the Module Writing Model was developed and a streamline model of existing models such as Robert Gagne's Nine Events of Instruction, ADDIE Model, ASSURE Model, 5Es Constructivist and Kemp's Module Writing Model. Line-by-line coding and theoretical modeling was done to streamline these models.

With its conciseness, it was endorsed by the Academic Affairs of Marinduque State College. This study aims to determine the acceptability of the instructional material. Specifically, it aims to:

- identify the number of faculty (including their specialization) that uses the Module Writing Model;
- 2. determine the usual parts included in each section of the Module Writing Model;
- 3. identify the different forms where the Module Writing Model is being used:
- determine the acceptability in terms of:
 - a. Adaptability,
 - b. Structure,
 - c. Usability,
 - d. and Perceived Effectiveness;
- 5. identify any recommendations and comments from the faculty members that can improve the 3Es Module Writing Model; and
- 6. ascertain significant agreement among the evaluators;

The results of this study can be used in order to find the most suitable programs and course that can utilize the said program. Further, this can be a basis of developing instructional materials for basic education.

Methodology

In order to achieve the objectives of this study, the applied methodology are hereby discussed.

Research Setting and Locale

This study was conducted at Marinduque State College located at the island of Marinduque province at the Southernmost Tagalog Region of the Philippine Archipelago. The said college offers various programs such as (but not limited to) education, arts, sciences, engineering and technology programs. It is the lone state college in the said province and most programs are accredited by the Accrediting Agency of Chartered Colleges and Universities in the Philippines.

Figure 1. Map of Marinduque State College





Figure 1 illustrates the location of Marinduque State College. Geographically, it is located at 13.453190 latitude and 121.84480 longitude. It is located at the Municipality of Boac, the capital town of Marinduque. As of 2022, the State College has a population of more or less 2000 students.

This study was conducted during the Academic Midyear of 2022. At this time, the academic institution is utilizing the flexible learning modality due to health threats globally brought by the Novel Corona Virus of 2019 Disease.

Research Design

This research utilized by a quantitative-descriptive approach. This approach is deemed fit to be used in this research. Data were gathered from the respondents are interpreted using quantitative and qualitative means. Descriptive research is frequently utilized in quantitative research designs, where the overall viewpoint provides some helpful indications as to which variables should be tested quantitatively. The research is descriptively designed whereas it will quantitative data gathering methods and shall be interpreted using qualitative descriptions and approaches.

Research Population and Sampling

The research population of this research are the faculty members of Marinduque State College of Academic. During the time, this research was conducted it was identified that there are 178 teaching faculty. Purposive random sampling was used in order to determine the expected respondents. It was computed using Slovin's Formula with the margin of error at 5%.

Rivista Italiana di Filosofia Analitica Junior

ISSN: 2037-4445

$$n = \frac{N}{1 + Ne^2}$$
; $N = Population$; $n = number of sample$

Using the mentioned data in this section and applied to the formula above, 125 respondents were identified from the said college.

Research Instrument

This research utilized a structured and a validated questionnaire. The questionnaire was validated before its usage by a subject matter expert (academic and curriculum expert), a research ethics committee (for legal and ethics matters) and a statistician (for setting of quantitative, measurable and verbal interpretations).

The research questionnaire is composed of four (4) parts. The first part is comprise of the demographic profile of the research respondents such as their area of specialization, years of service and whether they have professional education units. The second part identifies what are the usual sections that is included in the sections of the Module Writing Model. The third part consists of the acceptability of the instructional material in terms of structure, adaptability, usability and perceived effectiveness. Table 1 shows the rubrics in rating the Module Writing Model. Lastly, the respondents were asked for their insights and recommendations.

| Scale | Range | Verbal Description | Verbal Interpretation | | |
|-----------|-------------------------|---|--|--|--|
| 5 4.5-5.0 | | Llighty Assentable | All aspects (Elicit, Explain, Evaluate) are | | |
| 5 | 4.5-5.0 | Highly Acceptable | considered acceptable) | | |
| 4 3.5-4.4 | | Acceptable | All parts (Elicit, Explain, and Evaluate) of the | | |
| 4 | 3.5-4.4 | Acceptable | model are acceptable. | | |
| 3 | 2.5-3.4 Acceptable with | One part of the model is inappropriate to present | | | |
| 3 2 | 2.5-3.4 | Considerations | most of the lesson. | | |
| 2 | 1.5-2.4 | Less Acceptable | Two parts of the model is inappropriate to present | | |
| 2 | 1.5-2.4 | | most of the lesson. | | |
| 1 | 0.5-1.4 | .4 Unacceptable | All parts of the model is inappropriate to present | | |
| | | | the lesson. | | |

Table 1. Rubrics in Determining the Acceptability of the 3Es Module Writing Model

Table 1 shows the rubrics, the verbal description and interpretation that was used to rate the acceptability of the 3Es Module Writing Model. It is a 5-point Likert scale with 5 being the highest acceptability and 1 being unacceptable. The parameters for acceptability are defined as follows:

Adaptability – refers to the versatility of the model to be employed in various class size, topics and subjects.

Structure – refers to the conciseness, organization and sufficiency of the parts of the Module Writing Model.

Suitability – refers to the flexibility of the 3Es Module Writing Model in terms of teaching cognitive, psychomotor and values competencies.

Perceived Effectiveness – refers to the faculty's perception as to whether the learning outcomes for the course has been achieved using the Module Writing Model.

Prior to the validation of the research questionnaire, the researcher sought permission from the Office of the Vice-President for academic affairs.

In order to determine the significant agreement among the evaluators, Fleiss Kappa analysis is utilized in interpreting the ratings of the evaluators. The table below shows the corresponding rate and its interpretation.

Table 2. Fleiss Kappa Value Analysis and Interpretation

| FLEISS KAPPA VALUE | INTERPRETATION | | |
|--------------------|--------------------------|--|--|
| <0.00 | Poor Agreement | | |
| 0.00 to 0.20 | Slight Agreement | | |
| 0.21 to 0.40 | Fair Agreement | | |
| 0.41 to 0.60 | Moderate Agreement | | |
| 0.61 to 0.80 | Substantial Agreement | | |
| 0.81 to 1 | Almost Perfect Agreement | | |

Based from Table 2, there could be a significant agreement among the evaluators when the computed kappa value is greater 0.21. An almost perfect agreement happens when the Kappa value reaches 1.

Data Gathering Procedure

After seeking necessary permits to conduct the study and the validation of the research instrument, the schedule of the conduct of the assessment was properly framed, administering from June to July 2022. Retrieval was made on the middle of July 2022. The questionnaire was administered using Google Form. After the retrieval, data to be gathered was tabulated and presented in statistical tables, analyzed using analytical tools as computation of percentage and interpreted.

Results and Discussion

Based from the results of the data gathering procedures, the following are the findings of this study.

Number of Faculty utilizing the 3Es Module Writing Model

Figure 2 below shows the number of research respondents using the Module Writing Model.

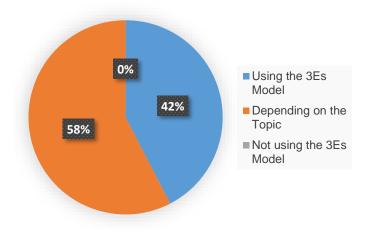


Figure 2. Number of Faculty using the 3Es Module Writing Model

As shown in Figure, all of the respondents are using the Module Writing Model. However, their use of the Module Writing Model mostly depends on the topic that they are teaching. 72 respondents (58%)

mentioned that their use of the model depends on what is the topic they are to discuss. These respondents are mostly teaching Language, Social Science, Professional Skills, and Mathematics courses. The other 42% are utilizing the College prescribed model in teaching Social Science, Professional, Science-Oriented, and Applied Sciences courses.

Common Parts of the Each Section of the 3Es Model

Figure 3 shows the different parts that is commonly incorporated by the research respondents in Elicit section.

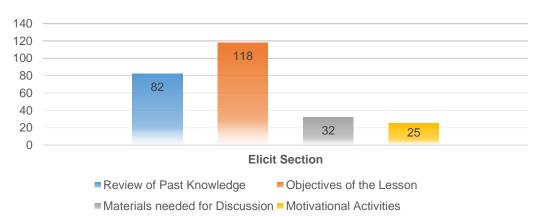


Figure 3. Common Parts of the Elicit Section

As shown in Figure 3, the common parts usually included by the faculty members are review of past knowledge; objectives of the lesson; materials needed for the discussion and motivational activities. Among these, 118 of the participants stated that they incorporate the objectives as it sets the expectations of the learners. Motivational activities are the least priority to be included in this section. Figure 4 shows the common parts incorporated by the faculty members of Marinduque State College in the Explain section.

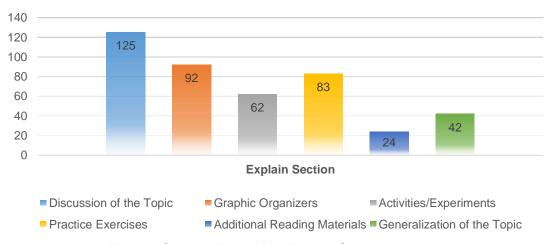
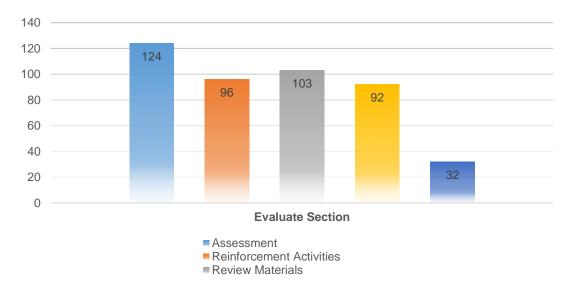


Figure 4. Common Parts of the Explain Section

Based from Figure 4, it can be observed that all the respondents agree to include the discussion proper in the Explain section. 92 of the respondents also include graphic organizers in this section; as these includes non-linguistic representations.



The least included are the additional reading materials. This can be explained by succeeding section as illustrated in Figure 5.

Figure 5. Common Parts of the Evaluate Section

As shown in Figure 5, the most common part included in the evaluate section are assessment activities. Aligned to additional reading materials, the respondents mostly include these part in the evaluate section as a reinforcement activity and as a part of their evaluation measure of the learning outcomes.

Further, research activities, review materials and projects towards the learning outcomes are being included by the faculty members in the evaluate section.

Different Forms of the Module Writing Model

The 3Es instructional material can be used for different forms and different learning platforms. This claim is expounded in Figure 6, illustrated below.

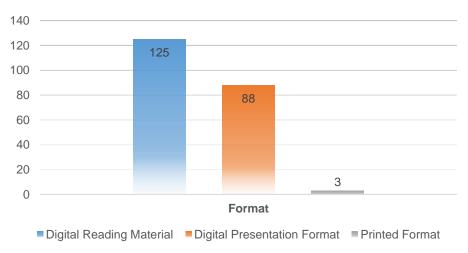


Figure 7. Format of the 3Es Module Writing Model

As illustrated in Figure 7, it can be observed that all of the research respondents are utilizing the 3Es Module Writing Model as a digital reading material in the form of PDF and Word file. 88 of the research

respondents are also making use of this in presentation format such as PowerPoint Files, Canvas Templates and Prezi formats. Three (3) of the research respondents were also printing the instructional material that they have created. This implies that the instructional that the model is adaptable to various formats.

Acceptability of the 3Es Module Writing Model

Adaptability

As assessed by the faculty members of Marinduque State College, the acceptability of 3Es Module Writing Model in terms of its adaptability are as follows.

Table 3. Acceptability of the 3Es Learning Model in terms of Adaptability

| Parameter | Mean | Verbal Description | |
|---------------------------------|-------|--|--|
| Adaptable to any learning group | 4.425 | All parts (Elicit, Explain, and Evaluate) of the | |
| size. | 4.425 | model are acceptable. | |
| Adaptable to any learning | 4.425 | All parts (Elicit, Explain, and Evaluate) of the | |
| platform | 4.425 | model are acceptable. | |
| Can be used in printed and | 4.45 | All parts (Elicit, Explain, and Evaluate) of the | |
| online learning materials | 4.40 | model are acceptable. | |

Based from Table 3, it can be deduced that the instructional model is acceptable as the mean ranges from 4.425 to 4.45. Based from the research respondents, the model is adaptable to any learning group size, platform, and can be used in printed and online learning materials. *Structure*

As assessed by the faculty members of Marinduque State College, the acceptability of 3Es Module Writing Model in terms of its structure are as follows.

Table 4. Acceptability of the 3Es Learning Model in terms of Structure

| Parameter | Mean | Verbal Description | |
|--|-------|--|--|
| Concise (Clear in its goals in delivering instructions to students)) | 4.425 | All parts (Elicit, Explain, and Evaluate) of the model are acceptable. | |
| Well-structured (Organized in its goals to deliver instruction) | 4.45 | All parts (Elicit, Explain, and Evaluate) of the model are acceptable. | |
| Adequate (Provides sufficient sections for teaching-learning experience) | 4.475 | All parts (Elicit, Explain, and Evaluate) of the model are acceptable. | |
| Versatile (Can be used for various instructional learning experiences) | 4.425 | All parts (Elicit, Explain, and Evaluate) of the model are acceptable. | |

Table 4 reflects the acceptance of the faculty members of Marinduque State College of the instructional model in terms of its structure, it can be deduced that the instructional model is acceptable as the mean ranges from 4.425 to 4.475. Based from the research respondents, the model is accepted in terms of its conciseness, structuring, adequacy, and versatility.

Usability

As assessed by the faculty members of Marinduque State College, the acceptability of 3Es Module Writing Model in terms of its usability are as follows.

Table 5. Acceptability of the 3Es Learning Model in terms of Usability

| Parameter | Mean | Verbal Description | |
|--|-------|--|--|
| The instructional material is suitable for specific skills development (individual development). | 4.35 | All parts (Elicit, Explain, and Evaluate) of the model are acceptable. | |
| The instructional material is suitable for competency development in doing tasks. | 4.375 | All parts (Elicit, Explain, and Evaluate) of the model are acceptable. | |
| The instructional material is usable for knowledge retention. | 4.4 | All parts (Elicit, Explain, and Evaluate) of the model are acceptable. | |
| The instructional material is suitable for values formation. | 4.325 | All parts (Elicit, Explain, and Evaluate) of the model are acceptable. | |

Based from Table 4, the instructional model is acceptable in terms of usability as the mean ranges from 4.325 to 4.4. Based from the research respondents, the model is usable in developing various competencies in cognitive, psychomotor and values aspects.

Perceived Effectiveness

Table 6. Acceptability of the 3Es Learning Model in terms of Perceived Effectiveness

| Parameter | Mean | Verbal Description | | |
|---|------|--|--|--|
| The instructional model helps in achieving the course intended learning outcomes. | 4.45 | All parts (Elicit, Explain, and Evaluate) of the model are acceptable. | | |
| Retention of students of information is enhanced. | 4.3 | All parts (Elicit, Explain, and Evaluate) of the model are acceptable. | | |
| Competencies are developed well. | 4.35 | All parts (Elicit, Explain, and Evaluate) of the model are acceptable. | | |
| Topics are well-understood. | 4.4 | All parts (Elicit, Explain, and Evaluate) of the model are acceptable. | | |

Table 6 reflects the acceptance of the faculty members of Marinduque State College of the instructional model based from their perceived effectiveness. It can be deduced that the instructional model is acceptable as the mean ranges from 4.43 to 4.45.

Table 7. Acceptability of the 3Es Module Writing Model

| Parameter | Mean Rating | Standard Deviation | Interpretation | |
|----------------------------|-------------|-----------------------|--|--|
| Adaptability | 4.43 | 0.52 | All parts (Elicit, Explain, and Evaluate) of the model are acceptable. | |
| Structure | 4.44 | 0.53 | All parts (Elicit, Explain, and Evaluate) of the model are acceptable. | |
| Usability | 4.36 | 0.60 | All parts (Elicit, Explain, and Evaluate) of the model are acceptable. | |
| Perceived Effectiveness | 4.38 | 0.61 | All parts (Elicit, Explain, and Evaluate) of the model are acceptable. | |

As seen in Table 7, all of the parameters that determines the acceptability of the 3Es Module Writing Model is within the Acceptable Range as shown in Table 1. The highest of which is the structure whereas the respondents commended the model for – brief, clear and concise. The ratings also reflect that the 3Es

Module Writing Model are acceptable in all parts. The deviation of less than 1, shows that the rating of the research respondents are not far each other.

On the other hand, in terms of Usability the research respondents rated it the lowest among other parameters. They commented on the improvement of the model for technical and skills oriented courses.

Comments and Recommendations for the Model

Table 8 shows the common comments for the improvement of the Module Writing Model.

Table 8. Summary of Comments and Recommendations to Improve the Module Writing Model

| Comments | Frequency | |
|--|-----------|--|
| "Develop and continuous use of the model" | 23 | |
| "Use variety of technology options." | 12 | |
| "Connect students to independent learning tools especially for | 0 | |
| technical and skills-oriented courses." | O | |

Based from Table 8, the continuous use of the model in developing the instructional material is recommended after its initial implementation. It has also been recommended to use of various technological options like integration in Web-Based learning management systems. In relation to the nature of the model, it has been recommended to consider independent learning that can be integrated to this instructional tool so that it can address skills-oriented subjects.

Significant Agreement on the Acceptability of the Module Writing Model

To ascertain the significant agreement among the evaluators, Fleiss Kappa analysis was utilized. The table below shows the results as to whether the faculty members agree on the parameters of the acceptability of the 3Es Module Writing Model.

Table 9. Significant Agreement on the Parameters of the 3Es Module Writing Model

| PARAMETER | KAPPA VALUE | STANDARD DEVIATION | p-VALUE | DECISION | INTERPRETATION |
|----------------------------|----------------|-----------------------|----------|-----------|--------------------|
| Adaptability | 0.44 | 0.52 | 7.78E-15 | Reject H₀ | Moderate Agreement |
| Structure | 0.47 | 0.53 | 2.60E-17 | Reject H₀ | Moderate Agreement |
| Usability | 0.44 | 0.60 | 2.14E-15 | Reject H₀ | Moderate Agreement |
| Perceived Effectiveness | 0.42 | 0.61 | 4.33E-17 | Reject H₀ | Moderate Agreement |

 H_0 = There is no significant agreement among the evaluators

As reflected in Table 9, it can be observed that for all the parameters used to determine the acceptability of the 3Es Module Writing Model the respondents has a moderate agreement. This implicitly reflects that the Module Writing Model is deemed fit to certain faculty member and others are looking out for additional features. Hypothetically, it was presumed that there is no significant agreement among the evaluators. However, based from the computed p-Value using data analysis feature in Microsoft excel – the null hypothesis is to be rejected at the values are higher than 0.05. Thus, supporting the Kappa value results that there is a moderate agreement among the faculty members. Based from the mean computed in Table 3 and the standard deviation, the moderate agreement reflects the different outlooks of the users towards the Module Writing Model.

Conclusion

Based from the findings of this study, the following conclusions are hereby drawn:

- 1. The crafted 3Es Module Writing Model significantly aided the faculty members in delivering the lessons in the blended learning mode.
- 2. Faculty members who handled social science, natural science, applied sciences and professional courses utilized the 3Es Module Writing Model in teaching the entirety of the courses. Other faculty members consider the subject matter in which the model is appropriately used like those teaching language, professional and mathematics courses.
- 3. For the contents of the instructional material; objectives of the lesson are the commonly integrated part in elicit section; discussion of the topic (including practice exercises and activities) can be found in the elicit part while assessment and reinforcement activities can be seen are integrate in the evaluate section.
- 4. The Module Writing Model was utilized in developing online learning materials and for presentation purposes as well.
- 5. The 3Es Module Writing Model was found to be acceptable in all forms (Elicit, Explain and Evaluate sections) in terms of its adaptability, structure, usability and perceived effectiveness.
- 6. There is a moderate agreement among the evaluators on the attributes of the model.
- The model was recommended to be continuously used in sciences and be enhanced for technical and skills-oriented courses.

References

Commission on Higher Education. (2019). *Commission on Higher Education*. Retrieved from Guidelines on the Implementation of Flexible Learning: https://ched.gov.ph/wp-content/uploads/Notice-of-Public-Orientation-on-the-CHED-Memorandum-Order-CMO-No.-4-series-of-2020-Guidelines-on-the-Implementation-of-Flexible-Learning.pdf

- Espique, F. (2020). Writing Effective Teaching Module for Flexible Learning. Baguio, Philippines: St. Louis University.
- Lim-Borabo, H. G., & Lim-Borabo, M. (2015). *Interactive and innovative teaching strategies : A Resource book for 21st century teachers*. Quezon City: Lorimar Publishing.
- Manoos, L. M. (2022). Elicit, Explain, Evaluate: Module Writing Model. *International Journal of Arts, Sciences and Education*, *3*(1), 138-153.
- Manoos, L. M. (2022). Philippines Patent No. 2022-01326-0-TCCR.
- Reimers, F., Schleicher, A., Saavedra, J., & Tuominen, S. (2021). Supporting the continuation of teaching and learning during the COVID-19 Pandemic. The Organization for Economic Cooperation and Development.