Coastal Community Empowerment Based on Transformative Learning in the Processing of Marine Products in Maluku Province

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Abstract

This research is conducted simultaneously with the incessant attention to the empowerment of society in many countries in the world. People who work as fishermen who inhabit the coastal areas of Maluku Province are less touched by community empowerment programs. They are often blamed, but not trained to expand their business. This article presents the impact of transformative learning-based training including: their learning needs, knowledge, skills, and attitudes, as well as performance in the marine home processing industry. This article develops questions that arise in transformative learning-based training. The participants are fishermen who are interested in developing fish preservation business. Key informants were 27 trainees and 4 instructors each with fish preservation skills, non-formal education, curriculum development and marketing management skills. Data collection through Focus Group Discussion (FGD) and semi-structured interviews as well as non-participant observation and document studies at training sites and household processing of seafood. Using interactive model data analysis techniques (Miles, M. B. & Huberman, A. M. 1994). This research frames the transformative learning-based training as a process of forming attitudes, improved skills and new experiences of the trainees to solve the problems of marine fish preservation. The learning experience becomes the basic capital in the development of household preservation industry in a sustainable manner.

Keywords: Training, Transformative Learning, Community Empowerment of Fishermen, Fish Preservation

Introduction

The coastal area of the Maluku islands from island to island other and has a wealth of marine resources. If the wealth of resources of the sea is well managed then it can bring prosperity for the people of the Moluccas. In this highly depends on the ability of its human resources to explore the wealth of resources of the sea. It takes the development of coastal communities through a variety of community empowerment programs. To examine more deeply about the empowerment of coastal communities, then advance the coastal waters and recognize the characteristics of the coastal communities.

The characteristics of coastal communities vary with the characteristics of an agricultural society. In terms of income, farmers have the income that can be controlled as a controlled harvest. Different case with the coastal communities whose livelihoods are predominantly fishermen. Fishermen struggled with the sea to get the revenue, then revenue can not be controlled. Fishermen face the resources are open access and high risk. It also results in coastal communities like fishermen have character firm, hard, plain and open. In addition, the characteristics of the coastal communities can be seen from several aspects, aspects of knowledge which in general got the knowledge handed down from his ancestors for example them to see your calendar and directions so they using constellation.

The population of the coastal community was defined as a group of people that lived in the coastal region and the source of life economy depending directly on the utilization of marine and coastal resources. From the business scale fisheries, coastal community groups in general are still catching fish without a boat, using a boat without a motor, a motor boat and outboard. Processing capture still traditionally processed, without business-oriented.

Empowerment is an effort to actualize the potential possessed by coastal communities. The coastal community empowerment programs involving community participation entirely, and community-based. Outsiders who get involved in the empowerment program as a professional escort, provide the solution of problems faced by coastal communities.
There are three potential resources in the coastal region of the Maluku islands, namely the richness of the sea, availability the potential workforce, and a typology of coastal communities. With respect to the wealth potential of these resources, can help Adult Educators compiled strategize and approach the improvement of coastal community empowerment through education and training in the management of seafood. Community empowerment based on transformative learning, answering the problems of development and sustainability venture industry household processing of seafood in the coastal region of the Maluku islands.

As it known, community empowerment has received much attention over the past few decades as one of the critical issues in the international development agenda. Particularly in Indonesia has been community empowerment program initiated by the village and the empowerment of women and gender disparities. Community empowerment is with regard to the development potential and capacity, whether private or group to be able to compete through entrepreneurial activities. Increasing community involvement in entrepreneurial activities can enhance social status from pre-welfare prospered, as well as giving broader social benefits.

Many of the community empowerment program is failing and unsustainable. Community empowerment program should start with the development of human resources through education. Empowerment of communities that integrate appropriate technology into education. Community empowerment that targeted adult education forms requires a more appropriate courses and training, including a demonstration of the various types of life skill, or through the pemasangan method. In this much-needed a graduate education courses Outside school as a professional adult educators. Professional educators can contribute to curriculum development and sustainable transformative learning model.

Community empowerment based on transformative learning aims for sustainable transformation of occurrence by following a new path, namely to re-create the community and to establish a more just, equitable and regenerative community system. The connection between transformative learning and sustainability education is an emergent theme in literature about sustainability education. UNESCO’s Report of the International Experts’ Workshop on Faith-based Organizations and Sustainability (Pigem, 2007), proposes that all education for sustainability, whether formal or non-formal, should “aim at learning to transform oneself and society” (p. 14). Others agree that in order for sustainability education to succeed, it must be transformative (Haigh, 2006; Sterling, 2004).

The need for empowerment, transformation and freedom of public expression is found in the literature of educational transformation. Transformative learning is not a simple thing. Transformative learning as a critical process where an adult student checking out their beliefs, values, and assumptions in gaining new knowledge and begin the process of personal change and social called reframing in perspective (Mezirow, 2003).

Transformative learning can bring dramatic and fundamental changes in the way we see ourselves, and the world in which we live (Merriam, 2004). Community empowerment-based transformative learning has long-term impact that is going on social change in the form of attitude and behavior consistent with the values of non-discrimination, equality and respect for the dignity Community (Felisa, 2016). Transformative learning refers to processes that result in significant and irreversible changes in the way a person experiences, conceptualizes, and interacts with the world (Hoggan, 2015).

Transformative learning perspective for educators, including teachers as change agents generally carry out transformative learning (Woodrow, 2017). Critical reflection as a framework for transformative learning on teacher education, facilitating novice teachers facing complex learning processes. Furthermore, the transformative learning contribute on management education (Closs, 2011).

Critical reflection, a concept and professional practice, covering various fields such as adult education, teacher education, health and communication studies (Brookfield, 2008). Reflective practice have played an important role for adult learning, but very minimal in adult education literature. Adult education requires variations in reflective practice research results as reference for adult education in a field that is often sad because less support the theory.

**Transformative learning**

Transformative learning is a critical process in which adult learners examine their beliefs, values, and assumptions in acquiring new knowledge and initiate a process of personal and social change called reframing in perspective (Mezirow, 2003). Transformative learning can bring fundamental and dramatic changes in the way we see ourselves, and the world in which we live (Merriam, 2004). Training on the basis of transformative learning has a long-term impact of social change in the form of attitudes and actions consistent with values of non-discrimination, equality and respect for the dignity of women (Felisa, 2016). Transformative learning refers to processes that result in significant and irreversible changes in the way a person experiences, conceptualizes, and interacts with the world (Hoggan, 2016).
Perspektif Transformasi

Mezirow (2003) describes “perspective transformation” as the process adult learners exhibit as they revise their meaning structures. This is the process of becoming an awareness of how and why pre-assumption came to limit the way people perceive and feel the world. Cranton (2002) through perspective transformation experiences, adult learners shift their understanding or assumptions in order to cope with new information that they then apply to their lives. Adult students learn how the impact of new ideas and information and of rendering their beliefs, values and direction.

Dirks (2012) looking at the perspective of an adult learning focused on the reflection of the nature of self, different ways of thinking and understanding subjectivity through the senses themselves, recognize through the senses. I believe that transformative learning as a work of the psyche (Dirkx, 1997). View of understanding subjectivity is more integrated and holistic, which reflect the intellectual, emotional, moral and spiritual dimensions of our existence in the world. This integrated view of personal aspects and also trascendental trying to explain and create social, cultural habits of our potentially transformative learning in the process. This sense, consistently articulate the work of students from learning of adults who have similar interests but may differ from the theoretical approaches, such as disclosed Cranton and Roy (2003), Yorks and Kasl (2006).

The transformative perspective serves as a filter that governs the meaning of various adult learners’ experiences. As a new experience the perspective is assimilated into the cognitive, affective and psychomotor structures. Change means a new development perspective which also means that the structure produces questions in the individual before values and beliefs occur (Mezirow, 2003).

Critical Reflection

According to Mezirow (1997) a person in the event of his life is in a confusing dilemma or is in a critical experience incident that can not be solved by a previous problem-solving strategy. Eventually he considers and explores options that shape roles, relationships or actions followed by action plans. This process is seen as a consciousness and deliberate starting from a dilemma and moving forward as a distorted assumption and the meaning of structure becomes changed through critical reflection. Thus the initial stage of the transformative perspective begins with the transformative learning process.

The key to transformative learning lies in a critical reflection on one's experience. Mezirow (1991) distinguishes between three types of reflection on experience: content reflection, thought process reflection and reflection of the premise. Only one of them is a premise reflection that can lead to transformative learning. Content reflection thinks about the real experience itself; reflection process thinking how to handle experience; and reflection on premises or critical reflection include self-examination, building social assumptions, beliefs and values about experience or problems. assumptions, beliefs and values about experience or problems. Two important points in the reflection phase according to Mezirow (2000) from 10 stages of transformative learning process. First, after experiencing a "confusing dilemma" the learner engages in self-examination which is often accompanied by "a feeling of fear, anger, guilt, or shame and secondly, a critical assessment of the premise's assumptions or reflections.

But given most research studies using Mezirow’s critical reflection theory as a theoretical framework (Taylor, 2003), cognitive development (as evident in critical reflection and rational discourse) should continue to be investigated as conditions necessary for transformative learning. How explicit research designs are challenging to test this assumption.

Adults students experiencing transformative learning experiences toward change, 2006 other factors including immigration, issues disputes, changes in the type and location of work (Cranton, 2006). Transformative learning provides learning experiences for prospective teachers as change agents (Wooddrow, 2017), as the frame of critical reflection for teacher education (Liu, 2013), and The integrated with critical reflection into management education (Loss, 2013).

Reflection activities in the learning process is very important for both teachers and learners. Transformative learning requires teachers who dare to take risks, be easily criticized, have an attitude of openness to challenge attitudes and assumptions. In this paradigm of learning as change, learning is understood as creative, participatory, and reflexive processes, and knowledge is recognized as approximate and relational (Kelly, 2010). Because transformative can not be taught but must be learned. The role of teachers in transformative learning is to create space for critical reflection and transformative transformation (Granton, 2002).

Critical reflection and discourse of reflection consists of two processes used to facilitate transformative learning. Without going through these two processes, it is impossible for a truly transformative learning action. Educators conditioned the discourse of reflection and responded by adult learners with critical reflection. Through this process, interwoven educational communication, Cranton (2002, p.8) states, that transformative learning allows students and educators to develop sincere relationships in which educators display the differences in student life and feel the difference exists in the life of oneself.
The results of research related to transformative learning, among others: (1) Model for educators about transformative learning to be a guide for professional development of educational technology (Cranton, 2002); (2) The task of cognitive development based on transformative learning theory by Mezirow (Merriam, 2004); (3) Transformative learning: integrating critical reflection into educational management (Closs, 2011); (4) Transformative learning experience at International Graduate Students from Africa (Yeboah, 2014); (5) Models of practical transformative learning for adult education (Dirx, 1998); (6) Discourse of transformative learning (Mezirow, 2003)

**Community Empowerment Through Non-Formal Education**

Community empowerment aims to increase the community's potential to improve the quality of life for all citizens through self-help activities. Objectives to be achieved through an independent community empowerment effort and able to adopt innovation and have a cosmopolitan mindset.

Community empowerment includes at least physical, intellectual, economic, political, and cultural aspects. This means that empowerment includes human development in total. Non-formal educational opportunities touch the broader aspects of empowerment, because the learning approach in non-formal education is more individualized and centered on the individual learners. In parallel with Cooms, Harbison (1973) states that non-formal education has various functions: (1) to improve the ability of the workforce; (2) to prepare the labor force, especially for the younger generation who will enter the employment field; and (3) to expand and improve knowledge, skills and attitudes about the world of work. In this case the process of non-formal educational activities depends on whether or not a job is organized, according to Axsin (1976) depending on the awareness of the gaps in the learning process. Education that has the main objectives to: solve individual, group, or community problems, growth and improvement of individual's basic abilities, skills, knowledge, and competencies (Boyle, 1981).

The results of empowerment of special community empowerment of women as follows: (1) Empowerment of women through education can improve the status of women (Helen et al 2016.; Felisa 2015; Ratna et al. 2015; Samina 2011 et al.); (2) The empowerment of women is concerned with the development of potential and capacity, both personal and group to compete through entrepreneurial activities. Women empowerment in the fisheries sector opens job opportunities, such as the European Union Commission published a report on women in the EU fishery industry). Data recorded in 2002 showed that there were 5000 women working in the European fishing industry, 6000 in aquaculture, 42 000 in processing and 8000 in management and government organizations. Issues include gender equity, such as equal payment, working conditions and social benefits between men and women as well as regulations on working conditions during pregnancies (MacAlister et al., 2002).

**Method**

The research of coastal community empowerment based on transformative learning in the seafood processing sector is planned to be implemented in Maluku Province in 2017 and 2018. Methods of data analysis are used to gain an in-depth understanding of critical, complex reflective learning that focuses on transformative learning. Explore learners in following each transformative stent. Methods of data analysis are used to gain an in-depth understanding of critical, complex reflective learning that focuses on transformative learning. Explore learners in following each transformative stent.

The method that will be used in achieving the long-term goal mentioned above is survey method using qualitative research type. This type of qualitative research is used to analyze the research data and identify the possible emergence of theme changes as well as transformational perspectives (Miles & Huberman, 1994).

This research uses qualitative research design in which primary and secondary data are collected using several methods through transformative learning-based training in the seafood processing sector in the coastal area of Maluku Province. The reason for choosing this type of qualitative research is to examine the things that are phenomenological and can use the hidden facts behind the phenomenon of each learner during the course of transformative learning. In addition, the characteristics of learners reflect local culture, low average education, low sociability, so they have limitations in expressing progress in their learning. Through qualitative research, it is possible for the researcher as an instrument to attempt to use social-psychology approach to reveal the uniqueness of each individual learners in their interaction with the source of learning both the instructor and other learning resources. It will reveal the truth in how learners demonstrate the knowledge, attitudes and skills of learning outcomes.

Participants as a research data source consisted of 4 Instructors, and 27 students, defined by "purposive sampling". The study was conducted for 1 year, including data triangulation.

The characteristics of the above-mentioned learners are very likely to use the most appropriate data collection tool is the semi-structured interview guide, and non-participant observation. Guidelines for semi-structured interviews enable researchers to explain questions in a language they can understand.
Steps for the preparation of learning program:

a. The Research Team compiled a "social map" and further identified the learning needs of coastal communities, and identification of learning resources. This activity has been implemented before the Learning Implementation Plan (RPP) was prepared;

b. The researcher conducted the first meeting which was attended by 27 prospective learners, 4 instructors, and the Department of Fisheries and Marine Affairs. The agenda of the meeting is an explanation of coastal community empowerment through transformative learning-based training. Identify fish processing preservation problems, as well as training materials. The meeting uses the Focus Group Discussion (FGD) method;

c. Implementation the second meeting with the workshop agenda of curriculum preparation which was attended by 4 Instructors and 27 students;

d. The third meeting is the opening of training implementation;

e. Implementation of training;

f. The final evaluation of the learning program

g. Fourth meeting, the preparation of development programs as follow-up activities.

Researchers used three data collection tools:

a. Focus Group Discussion (FGD), to obtain comprehensive data covering recruitment of students, how to design training curriculum, methods and training strategies, learning atmosphere, effectiveness and efficiency of learning time usage, arrangement of training facilities, and setting of training venues as well as follow-up program development learning;

b. Guidelines for focused semi-structured interviews to reveal the perspective of transformation, critical reflection and new experiences of using fish processing technology;

c. The test of learning results, refers to the achievement of learning objectives.

Researchers are equipped with qualitative approach, research ethics, and ability academics non formal education.

Data analysis using interactive analysis (Miles & Huberman, 1994). Qualitative analysis is done by studying the data, dividing it into units that can be processed, synthesize, look for patterns, and find what is important to learn and report. The data obtained is then reduced and further verified by using triangulation model to obtain relevant and meaningful data according to the research problem and the focus of this study. Triangulation techniques can be done by: (1) comparing FGD results data, observations, interviews, and test results data; (2) compare what people say in public with what is said personally; (3) compare what people say about the research situation with what is said all the time; and (4) comparing the state of one's perspective with his various opinions and views on the problem according to the experience of reality he sees.

Results and Discussion

Total area of Maluku province is 581,376 km$^2$ consisting of sea of 527,191 km$^2$ and land of 54,185 km$^2$. Thus about 90% Maluku region constitutes sea and only about 10% constitutes land. Maluku province consistent of insular region and that's why it is called a province of a thousand islands. A cluster of big and small islands totaling 599 islands extends from north to south, where the biggest island is Seram island (18,625 km$^2$) followed by Buru Island (9,000 km$^2$), Yamdena island (5,085km$^2$) and Weta island (3,624km$^2$). Island of Maluku province are classified into two main sections, namely volcanic islands and coral reef island created from collision between orogenetic system and Pacific circle and Sunda orogenetic system. Land Maluku province is covered by a series of 4 (four) mountains and 11 (eleven) lakes existing in most regencies/cities, namely Mt Binaya in Seram island, Mt. Salahutu in Ambon island, Mt Kapalmada in Buru island and Mt. Api Banda in Banda island. This province is also flowed by 113 big and small rivers such as Eti, Tala Sapawela, Ruwata and Mala rivers in Seram island Walgreen river in Buru island and Tamrian river in West Southeast Maluku. These data indicate that Maluku province has (1) the potential of natural resources are very rich, (2) It has coastal areas stretching the length and breadth, (3) the settlement population is more concentrated in the mouth of estuaries, (4) in the sociological community characteristic of the Sea, and (5) Staple job more as a fisherman.

Potential sea resources owned the Maluku province mainly marine fisheries need to be managed in a professional manner so as to bring the prosperity of its people. Sea fishing efforts in Maluku province filmed done by traditional fishing, namely by boat, speed boat and a small booth with a simple capture equipment including fishing rods and fishing nets. Fish catches are durable goods, therefore needed fish
preservation technology. Fish production is preserved, among others dried tuna fish Banda, tuna fish *Asar*, fish flour (*abon*), frozen skipjack fish, frozen fish filled, prawn frozen, squid frozen, *handen* fish, dried intestines fish, octopus frozen, Mollusca shell frozen, salt fish, frozen fish. Types of komuditi the sea fish preservation technology.

**Identification of Learning Needs**

Learning needs identification is implemented on the coastal region of the majority society to work as a fisherman. A social map of the village became the instructions carry out the identification of learning needs and the needs of the learning resource. Social map that exists in any Office of the village contains: (1) a list of population by sex, age and type of work, (2) a list of income the head of the family and level of well-being, (3) the list of infrastructures and facilities belonging to the private property of the village and, (4) list of potential natural resources. This social map can provide initial information about the presence of the fishing households. In addition community leaders asked for more relevant to who was interviewed about the problems of preservation of marine fish. Research continued with carrying out the interview directly to fishermen.

A senior fishing expresses his experience for 25 years as a fisherman. He complained about his work as fishermen who feel not having quality fish preservation skills. The problems that plagued the drying fish that is less acceptable to consumers because fish processing depends on the heat of the Sun. As long as the fishermen never get training in preserving fish. The problems being experienced among others many fish are damaged and less acceptable to consumers because fish processing depends on the heat of the Sun. As long as the fishermen never get training in preserving fish. “ (Interview).

The fish needs to be handled properly in order to remain in a proper condition to be consumed by the public. Fish that are not preserved only deserve to be consumed within a day after being arrested. Various ways of preserving fish had a lot done, but most of them are not able to maintain the properties of the natural fish. One way to preserve fish that does not change the nature of the fish is cooling and freezing.

Our problem as fishermen who live in rural areas is the technology of preserving fish using machine equipment, we do not have the ability to buy it. In addition, we get trouble to get a quality resource. “ (Interview)

The perceived problems the fishermen are fishing production marketing results. These concerns relate to three factors, namely the problem of packing technology, transportation problems of marketing and marketing issues. The attractive packaging techniques are required, the image of the fish taste unchanged, hygienic and durable. Marketing Center is the city of the province so that the transportasi had difficulty for fishermen who were in the other islands. Fisheries production transportation using ships and aircraft to the center of the province. This has the consequence of higher financing. Fishermen need knowledge management marketing fishery production.

I have a cottage industry of dried tuna fish Banda. The problem that I often encounter is the packing of production associated with the humidity, the issue costs transportasi to the center of marketing. A number of those problems being factors cause my household industry are difficult to develop. “(Interview)

**The Planning Of Learning**

The problems faced by the fishermen learning needs discussed in FGD forum. FGD followed prospective participants, the instructor, Government and other stakeholders. FGD aims to clarify the learning needs of the trainees and to plan a training curriculum, requirements as a trainer, instructor competency, training materials, learning experience, the determination of the time and place.

**Table 1. The results of the Focus Group Discussion**

<table>
<thead>
<tr>
<th>Fokus</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>The requirement of trainee</td>
<td>a. Staple work as fishermen;</td>
</tr>
<tr>
<td></td>
<td>b. Settled in coastal areas;</td>
</tr>
<tr>
<td></td>
<td>c. Interested and then declared themselves as prospective trainees;</td>
</tr>
<tr>
<td></td>
<td>d. Not bound with other work and have enough time during the process of</td>
</tr>
<tr>
<td></td>
<td>training and an internship at a company fish preservation.</td>
</tr>
<tr>
<td>Provide objectives learning</td>
<td>Preparing trainees to be able to have independence in processing fish</td>
</tr>
<tr>
<td></td>
<td>preservation business</td>
</tr>
<tr>
<td></td>
<td>a. Changes in attitude, shown in the form of enthusiasm, optimism,</td>
</tr>
<tr>
<td></td>
<td>diligence and appreciate;</td>
</tr>
<tr>
<td></td>
<td>b. Increased ability, shown knowledge and understanding increased,</td>
</tr>
<tr>
<td></td>
<td>intelligence in the form of ability to solve the problems of fish</td>
</tr>
<tr>
<td></td>
<td>preservation, including marketing management issues of production;</td>
</tr>
</tbody>
</table>
Improving intellectual skills, including (1) linking new information with existing information in participants' memories, (2) organizing new skills, (3) prioritizing prerequisite skills, (4) determining effective ways to group information about job skills.

The combination of reflective learning model with direct learning model

Learning steps:
- Deliver goals and prepare students. Delivering goals of learning followed by focusing the attention of learners to bring back the experience;
- Presentations, demonstrations and manage;
- To achieve clarity;
- To achieve understanding and mastery;
- Exercise;
- Provide guided training;
- Reevaluating experience and providing feedback.

Training materials
- Get to know the types of equipment used and the skill of its use;
- The order of processing;
- The process of processing and practice exercises;
- Types of processing techniques;
- Exercise practice on what types of production: (1) processing dried skipjack fish Banda, (2) frozen skipjack fish, (3) prawn frozen, (4) squid frozen, (5) dried intestines fish, (6) salt fish, (7) frozen fish;
- Standard moisture content;
- Packing technology;
- Marketing management;

Learning Resources
- Human learning resources:
  - (1). one person professional in the field of non-formal education; (2). 2 persons who is experienced and skilled in the field of preserving fish; (3). one person who is experienced in the field of marketing management;
- Non-human learning resources: one package fish preservation equipment for training and 4 household industry seafood processing for the internship process.

Different types of learning experiences
- Skilled in making preservation equipment;
- Understand the standard moisture content;
- Skilled in packing and storage;
- Skilled in marketing management.

Time and place of the training
- Training time for 21 days the hot season for training and 3 months for the apprentice method;
- The determination of the place in the coastal region inhabited by a majority of the fishermen and easily reachable by land and sea transportation.

Implementation Of The Learning

In the implementation phase of the learning program, all planned learning activities are scheduled to be carried out. The expectations of the students' learning needs and the fulfillment of instructors' promises to learners can be illustrated in the learning process. The instructor acts as a teacher strives to create good learning conditions, fosters the spirit of learning to learners, presents learning materials based on competency standards, uses adult learning strategies and methods, uses relevant media and maximizes the use of fish processing equipment efficiently and evaluation of learning outcomes.

The Instructor's activities and the Learners activities during the training process are described in table 2, below.
**Table 2. Activities Instructors and Learners**

<table>
<thead>
<tr>
<th>No.</th>
<th>Focus</th>
<th>Activities Instructors</th>
<th>Activities Learners</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Get the attention of learners</td>
<td>Serve fast cuts of videos and ask probing questions.</td>
<td>videos view and then answer questions from Instructor.</td>
</tr>
<tr>
<td>2</td>
<td>Learning objectives</td>
<td>The instructor explains the objectives and targets of learning.</td>
<td>The training participants linked their initial experience to the goals and targets of learning.</td>
</tr>
<tr>
<td>3</td>
<td>Present teaching materials</td>
<td>Communicating facts, demonstrating the stages of teaching materials and trained the skills of using fish preservation processing equipment.</td>
<td>Taking into account the facts related to the processing of fish preservation and subsequently practicing the examples that the Instructor demonstrates.</td>
</tr>
<tr>
<td>4</td>
<td>Do study guidance.</td>
<td>Individual guidance during practice.</td>
<td>Demonstrate and manage your own learning as instructed by the Instructor.</td>
</tr>
<tr>
<td>5</td>
<td>Assess performance</td>
<td>Provide practical assignments and subsequently provide performance measures to determine whether each trainee can demonstrate according to the learning objectives.</td>
<td>Individually practicing the tasks assigned by the Instructor.</td>
</tr>
</tbody>
</table>

**Note.** View text for a detailed explanation of learning events

**Get the Attention of Learners**

Creating attention early in learning is directly related to learning motivation. Through FGD, the instructor has identified the learning needs of the training participants who were instructed to determine strategies to increase attention. Two techniques are used in generating the attention of fast-cut video and using probing questions. Interview results in drawing the attention of learners disclosed thus:

- The video footage illustrates the comparison of two processing processes: traditional processing that we usually do with modern processing that will be the training material. We are enthusiastic about viewing, even some of us have re-aired. Followed by asking critical questions from the Instructor, such as: "What do you think is causing the processing of fish preservation that is done traditionally less favored by consumers?". We alternately answered questions, even complement each other's answers. We experienced an atmosphere of excitement and fun in watching every Instructor's sayings and gestures. "(Interview 9)."

Basically, the activity of creating attention is generating the motivation of learners to learn. The higher the motivation of learners to learn the more positive attitude toward the learning. Therefore, motivation plays an important role in learning. Learners who do not have the motivation to learn will not show the quality of learning and achievement is good. The results of interviews related to the motivation to learn can be explained below:

- A learner who has a high learning motivation shows a positive attitude in learning activities because they feel the learning material is relevant to the problems of learning needs. The learning objectives presented can add to the belief in success in learning because he is diligent in following the learning. Achieved learning achievement makes him satisfied and higher confidence if given the task of learning. "(Interview 5)."

**Provide Learning Objectives**

The key to success in adult learning is to have specific goals about behavior and performance that are clear and moving toward that learning goal consistently. Instructors need to explain to learners what they should try to learn. The learning objectives are proposed to help learners connect their abilities and experiences with the latest learning to be presented. Through the interview can be explained the relationship of experience that has been owned with learning objectives as follows:

I worked as a fisherman for 18 years and have had little experience in traditional fish-pickling processing, but I know that fish preservation technology is getting more and more developed. I have trouble using fish preservation technology using modern technology. After taking fish preservation training I feel the initial experience as a basis for developing the latest skills, experience and skills. "(Interview 19)."
Learning by connecting ideas or facts with the latest ideas or facts tends to produce permanent memories, even resulting in good learning achievement. Learners will learn more effectively if the material being studied is closely related to the out-of-training experience. Through the interview it can be explained the accessibility of the initial experience with the latest information and facts in the following lessons:

When new learning is about to take place, relevant prior information must be internally accessible so that it can be part of the learning event. This can be done by asking a probing question focusing on the gap of the initial experience with the learning objectives achieved. Such questions can be useful for improving the spirit of learning. "(Interview 3).

**Present Teaching Materials**

Learning events occur when information, facts, new skills are presented to learners. The sequence of fish preservation processing materials presented are:

a. Get to know the types of equipment used and the skill of its use
b. The order of processing
c. The process of processing and practice exercises
d. Types of processing techniques
f. Standard moisture content
g. Packing technology
h. Marketing management

The learning process follows the sequence of presentation of learning materials. The presentation of matter is a stimulus which is a learning event. The existence of a stimulus emphasizes the features that encourage learners to choose what they want and then pay attention to it. The most important element in learning is the fact-related stimulus to support the birth of new concepts, stimuli related to attitudes that support honesty, rigor, cooperation, tolerance, discipline, obedience, and stimuli related to technology to support the formation of skills. Interviews on the learning process are explained as follows:

The core activities of learning to achieve the goal, which is done in an integrative, inspirational, fun, challenging, motivate learners to actively seek information, facts and skills and provide sufficient space for the creation of initiative, creativity, and independence in accordance with talent, interest and psychological development learners. "(Interview 1).

In the condition of presenting learning materials, Instructors use andragogic approach and in developing attitudes, knowledge and skills using a scientific approach. Furthermore, andragogi approach in learning people is explained through interview, as follows:

Adult learning (andragogy) emphasizes more on guiding and helping adults to discover the knowledge, skills and attitudes in order to solve the problems of life it faces. The accuracy of the approach used in organizing a learning activity will certainly affect the learning outcomes of the learning community. Tutors should pay attention to adult learning principles for guidance or guidance in the practice of guiding adult learning activities. The principles of adult learning are: self-image, experience, learning readiness and learning orientation."(Interview 1).

Furthermore, a scientific approach is used to shape the attitudes, knowledge and skills described through interview results, as follows:

The approach of scientific learning emphasizes the importance of collaboration and cooperation among students in solving every problem in learning. This scientific approach makes students actively observe, ask, try, cultivate, decorate, reason and create. Thus, the scientific approach touches the three domains of the sphere of attitude, knowledge and skills."(Interview 2).

**Do Study Guidance.**

Learning guidance is given in the form of communication between instructors and learners, which can help guide learners achieve goals. This guidance stimulates the direction of thinking and helps keep learners in the learning process that leads to efficient learning situations. The purpose of providing guided training can be explained through the following interview results:

Provide learning coaching aims to assist learners in the training process, and to ensure progress from one state to another in order to improve retention, make learning work smoothly and enable learners to apply skills to new situations. "(Interview 3).

Processing of fish preservation uses more motor skills. Motor ability generally involves activities of physical action and the use of muscles to perform a purposeful action. Explanation of difficulties demonstrating motor skills and how to receive mentoring through the following interviews:
I have had difficulty using new equipment that requires a high level of motor skills. I was in a state of confusion and totally unable to exercise. The instructor came to me and repeatedly gave examples and I practiced over and over again until my hands were not rigid and skilled at operating the new equipment. "(Interview 4).

Another difficulty that the learner generally experiences in the form of intellectual skills, which in addition involves the attitude of courage and motor skills also requires intellectual analysis. For example, manipulating the processing of fish preservation, also manipulate the use of equipment to produce durable fish preservation products and tastes favored by consumers. This can be explained through the interview results as follows:

I once tried to engineer fish processing by cutting the order of use of the equipment. Several times I tried to engineer followed instructions from the Instructor. Many of my difficulties, but high optimism of success. I was approached by the Instructor and there was a discussion that took very intellectual analysis. We try to manipulate the processing and technical aspects of repeated use of the equipment and the learning activity ends with a new product. "(Interview 16).

**Assess performance**

The final activity of the training is assessing the performance of learners. Assessing learners' performance to determine whether the desired learning has taken place. Learners are assessed to determine whether the training meets the objectives, and also to know whether each learner has fulfilled the desired training objectives. Students are given the task of processing fish preservation through the manufacture of fish abon. Performance appraisal results are shown in table 3,

**Table 3. Assessment of student's performance**

<table>
<thead>
<tr>
<th>SN</th>
<th>Performance Indicators</th>
<th>Very Perfect</th>
<th>Perfect</th>
<th>Almost Perfect</th>
<th>Not Perfect</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Arrange planning</td>
<td>86</td>
<td>12</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>Skills to choose the type of fish</td>
<td>82</td>
<td>18</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>Fish processing skills follow standard procedures</td>
<td>78</td>
<td>9</td>
<td>13</td>
<td>0</td>
</tr>
<tr>
<td>4</td>
<td>Preparing work equipment</td>
<td>91</td>
<td>9</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>Use tools in working order</td>
<td>69</td>
<td>14</td>
<td>17</td>
<td>0</td>
</tr>
<tr>
<td>6</td>
<td>Skillful use of tools</td>
<td>78</td>
<td>12</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>7</td>
<td>Timeliness in accordance with the steps of work</td>
<td>79</td>
<td>13</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>8</td>
<td>Test the standard water content</td>
<td>75</td>
<td>14</td>
<td>11</td>
<td>0</td>
</tr>
<tr>
<td>9</td>
<td>Test sense image</td>
<td>75</td>
<td>12</td>
<td>13</td>
<td>0</td>
</tr>
<tr>
<td>10</td>
<td>Packing skills</td>
<td>89</td>
<td>11</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Note. N = 27

The above performance measurement data shows that the average trainee has performed well in accordance with the learning objectives. The learner has performed a good performance evidenced by the addition of knowledge shown in the planning that 86% have planned the tasks perfectly, 12% have perfectly planned the task of activity and only 2% less perfect in the planning task of activity. Good performance is evidenced by the support of discipline attitude, thoroughness, courage in processing fish and work in sequence. Similarly, good performance is supported by motor skills and intellectual skills in processing, working and using equipment.

Identification of learning needs aims to define the reflection of transformative learning reflection with the problems experienced by learners. The trainees come from the community inherent in themselves problems that are learning needs. Therefore, learners are eager to follow the transformative learning toward changes in the life factors that they experience. The results of the study indicate that learners experience problems that can only be solved through transformative learning, in the hope that there may be changes in the life factors that they experience, (Tisdell 2000; King, 2004, Cranton, 2006). Learners come from fishermen who live in the coastal areas have a great desire to follow transformative learning in the hope of getting the learning experience (Woodrow, 2017).

A perspective transformation as shown by adult learners as they revise the structure of its meaning. This is a process of being very conscious of how and why presuppositions have hampered the way people perceive, understand, and feel about the world. In addition, according to Cranton (2000, 2002, 2006), through the experience of perspective transformation, adult learners divert their understanding or assumptions to address new information that they then apply to their lives. Adult learners learn how new ideas and information can have an impact and are "out of balance" with their beliefs, values, and ways of
understanding. The radical changes they experience are often a significant step toward a lifelong journey to their full potential. The perspective of transformation can occur as a result of an acute personal or social crisis. For example, adult learners can experience a perspective transformation through natural disasters, the death of another important person, becoming refugees, job losses, wars, divorces, or debilitating accidents. This experience is sometimes stressful, painful, and can cause individuals to question the essence of their existence (Mezirow, 1997).

Before the training begins they find it difficult to live and confuse in getting the cost of living. Eventually he considers and explores options for forming new roles, relationships or actions followed by action plans. This process is seen as a consciousness and deliberate that begins with a dilemma and moves forward as a distorted assumption and the meaning of structure becomes changed through critical reflection (Mezirow, 1997). Finally, it directs individuals to consider and explore options to form new roles, relationships, or actions that are followed by action plans. This plan consists of acquiring knowledge and skills, trying new roles, renegotiating relationships, and building competence and confidence. The re-integration process is completed when the individual fully incorporates new learning. That is, attitudes, beliefs, and behaviors into his life are evolving into new, changing perspectives (Mezirow & Associates, 2000). Most of the time, new information assimilates into new ways to understand and new perspectives take root (Mezirow, 1997, 2000).

At the end of the transformative learning activities learners experience personal development. The research findings show that the students are more focused and motivated in learning to see the readiness of learning is high. They are more courageous in practicing diligent and more diligent skills in trying and fixing mistakes. The findings of this study are in line with the findings of Helen M Haugh and Alka Talwar, 2016.

Conclusion
First, the planning of transformative learning begins with the identification of learning needs. The preparation of a training curriculum is developed jointly involving people who have professional competence and involve trainees as well. This way in the learning process occurs a more communicative, cooperative, and constructive. Positive impact for trainees who feel confident of success in training because the training centers on their problems.

Second, it reminds us to remain open-minded towards different alternatives when faced with educational problems. Essential to the critical reflection process is to explore alternative ways of thinking and living today to provide an opportunity to challenge our way of knowing. If we become uncritically captivated by certain ways of thinking or belief, including the individual approach to critical reflection, we may fail to examine our own theoretical assumptions and practices.

Third, the Instructor emphasizes the value of action change when encouraging critical reflection among learners. It is very valuable to facilitate learners to re-examine their assumptions, understand their learning assumptions, and look for alternatives. This encourages transformative learning to follow reflection. It is an action based on cognitive processes for analyzing, critiquing, and reframing that contribute to transformative learning.

Finally, although this framework offers many insights that guide and inspire Instructors to explore strategies in our own learning practices to enhance transformative learning. Instructors ultimately can also instill the best critical reflection habit for transformative learning to learners in other training activity program.

References