

363.34
2059
11

Ximara Borrillo

2059

NOTES FOR A DISCUSSION ABOUT
DISASTER EDUCATION

GUSTAVO WILCHES-CHAUX



INFORMATION: PREREQUISITE FOR PARTICIPATION

This paper is based in the conviction that in order to be fully effective, pre and post disaster plans, programmes and activities must be deeply rooted in the communities they suppose ^(to be) protecting or benefiting. This means that those communities must have an active participation in the different stages of pre-disaster planning, mitigation and preparedness and of post-disaster relief, recovery, reconstruction and development.

The prerequisite for participation is information. Only when there is enough information available, and when this information is properly digested, individuals and communities are able to assume an active role in a particular process. In other words, we are talking about EDUCATION FOR AND BY PARTICIPATION.

Later on we will find why I am using information and education almost as synonymous (only in the specific context of this paper).

But before, I must say that on and after the particular moment when an organisation establishes contact with a community in order to develop disaster related (or any other) activities, this organisation and its programmes must be considered TOOLS OF THE COMMUNITY FOR THE PURPOSE OF ACHIEVING COMMUNITY GOALS. Unfortunately the opposite position (i.e. the organisation using the community to achieve its objectives) seem to be the most common. To reverse this is not only matter

of how a programme is designed, structured and executed, but depends on elements as subtle as the training, sensitivity, attitude and aptitudes of the individuals who personify the organisation in the field (not to mention policy makers and high rank executives).

In an UNDRP document (Preparedness Aspects: Disaster Prevention and Mitigation, vol 11, 1984) I found that they are defining (which is a dangerous task per se) PUBLIC INFORMATION as "the deliberate, planned and sustained effort to establish and maintain mutual understanding between an organisation and its publics". This definition is provided by the British Institute of Public Relations and could be well applicable in the field of commercial-like enterprises and their customers but I disagree with the way they are applying it to a situation where there is not an organisation FACING "its publics" but a community facing a present or potential hazard.

The purpose of public education in relation with disasters is not to "educate" the public about a particular organisation and its products but to create in the community environmental awareness and generate (or motivate) appropriate and coherent responses. (In fact the same UNDRP document well understands this point of view, which makes even more odd that they be confusing PUBLIC EDUCATION WITH PUBLIC RELA-

TIONS in their definition. Obviously all governmental or volunteer organisations need the function of public relations in order to deal with their particular donors or publics, but this activity is completely different from public education

EDUCATION: THE PROCESS OF DIGESTING INFORMATION

AND GENERATING RESPONSES

"To digest: to think over, to absorb into the mind"

Oxford Dictionary

"Education is information process, for the explicit purpose of reducing uncertainty"

Andreas Fuglesang

(About Understanding)

For the purpose of this paper we will understand EDUCATION as the process by which an individual (or community) receives information coming from the environment, process it (i.e. compares it with his/her own knowledges, experiences and values stored in the memory) and as a result generates new information with which:

- Rearranges, redefines or enriches (quantitatively and qualitatively) his/her own "bank" of information.

- Produces external effects: CHANGES in the environment. These changes, at their time, generate new information that feeds-back the entire process.

I am intentionally describing EDUCATION by the process LEARNING, that is processing information and generating responses. Could we say then that computers are "subject of education"? The answer is: in certain form YES. The matter of this paper is not artificial intelligence, but as the question could raise, I will say that as far as I know the "learning" possibilities of a computer are determined by the instructions imprinted in its programme and by the limited "innovative flexibility" that they allow, while "human systems" (individuals or communities) are gifted with the ABILITY TO FAIL - not only to disobey the "learn. programme" but even to modify it according to the new experiences and knowledges. That gives us the possibility to SWITCH to previously unknown information arrangements. In other words: CREATIVITY. I am emphasizing the point because in my opinion one of the main purposes of what is called Public Education must be to provoke this mental jump or switching to creative re-interpretations of the surrounding environment in order to stimulate original responses.

From the given descriptions we can derive some draft conclusions :

- The Education/Learning process will be complete only when the received information has been properly digested, generating both the internal response (re-arranging and/or enrichment of previous information and mental patterns) and the external response (environment changes).
- The process is continuous, since all changes generate new information that feeds back the entire process.
- The information transmitted by the source (call it environment, teacher, mass media, etc) represents only a limited percentage of the Education/Learning process. Its processing, digestion and external responses complete the process.
- The means, ways, methods and aids used to SHAPE and transmit the information (content or message) constitute an important component of the message, or can be even more powerful

than the message itself. That's the case of the so called "hidden curriculum" of a particular school, where the students learn more from the whole daily-life-structure of the school and from the teachers attitude, than from the "theory" he/she is giving them.

"THE MEDIUM IS THE MESSAGE"
Marshall McLuhan

"THE MESSAGE IS NOT THE MEDIUM"
John Bowers

- "The worst crime a communicator can commit is effective communication of inappropriate or misleading messages. It is certainly worse than no communication at all, since it confuses the receivers and destroys the credibility of the communicator (...) ... make sure that what you propose to say will be valid, appropriate and acceptable to your intended audiences. "

John Bowers

(In Some Thoughts on Comm
Disasters and the Small Dwe

- Means, ways, methods and aids must be able to RELEASE the learning process in the receiver.

KEY ELEMENTS IN AN EDUCATIONAL RELATIONSHIP

Three key elements are to be identified in an educational relationship:

- 1- INFORMATION: The message to be transmitted ("... valid, appropriate, acceptable...")
- 2- COMMUNICATION: Means, ways, methods and aids used to shape and transmit the information. In many education processes, especially in the context of community development (what OXFAM calls "social Education") more than information to be transmitted, there is information to be "CONSTRUCTED" in a process of COLLECTIVE DISCOVERY. In this case, means, ways, methods and aids weight much more than any pre-designed messages and all information is addressed to reinforce that process.

3 - AFFECTION (LOVE): Mutual confidence, trust, credibility and affinity between the transmitter and the receiver.

This last element, as all subjective issues, could be matter of endless theoretic discussions with arguments as valid as the possibility to derive good lessons out of "bad examples" (learning by contrast), etc. But my intention is only to propose as a both **ETHICAL** and **PRACTICAL CLUE** that any person trying to induce, motivate or facilitate a learning process in an individual or community must **LOVE** what he/she is doing and the people with whom he/she is involved. Perhaps here lies the secret of creating the environment able to nourish a fruitful educational relationship.

We can add **HONESTY** to the ingredients, considering that in an educational relationship one is honest only if one believes what is saying, loves (and enjoys) what is doing ("teaching") and trusts those who are involved with one in the process.

In his "Keynote Address" to the participants in the UNHCR Emergency Management Training Seminar (Geneva, March 1986) Ian Davis enumerates four ATTITUDES that complete the picture of the perfect educational relationship:

- OPENNESS to criticism, new ideas and insights, others experiences and knowledges, changes.
- EXACTNESS of objectives and tasks.
- CREATIVITY
- SERIOUSNESS

THREE DIFFERENT LEARNINGS, ONLY ONE TRUE LEARNING PROCESS.

SENA (Servicio Nacional de Aprendizaje) the main professional training and community development organisation Colombia, has been redefining its philosophy and policies after almost 30 years of experience in the field.

In 1985 SENA established under the title of TECHNICAL UNITY the principles that are guiding the whole activity of the organisation and the strategies, methods and facilities to translate them to daily realities.

All the levels of the Organisation participated in the process of formulating the Technical Unity and the norms were issued only after prolonged nation-wide discussions to validate the theory with the existing knowledge, experiences and actual possibilities.

In the central core of the Technical Unity lies the fact that the so called INTEGRAL PROFESSIONAL TRAINING (Formación Profesional Integral) has the next three main objectives:

- **LEARNING TO LEARN:** Ability to generate original, critical and creative responses to new situations and new challenges. Ability to make a learning-knowledge generating experience out of any life situation.

ABILITY TO ESTABLISH NEW RELATIONS

ABILITY TO GENERATE NEW INFORMATION

- **LEARNING TO DO**: Operations themselves (skills). Understanding their scientific and technological principles. Ability to apply, adapt, improve and eventually reject technologies and techniques.

ABILITY TO ACQUIRE AND DEVELOP SKILLS.

- **LEARNING TO BE**: Discovery, acquisition, construction and development of **VALUES** and **SOCIAL SKILLS**. Success based in cooperation rather than competition. Social and environmental responsibility. Understanding "what's going on".

ABILITY TO ESTABLISH NEW VALUES

ABILITY TO DEVELOP NEW ATTITUDES

INTEGRAL PROFESSIONAL TRAINING is a **PERMANENT PROCESS** by which a person (individual or community) acquires and develops knowledges, skills and aptitudes, and identifies, generates and assumes values and attitudes for his/her own **HUMAN REALIZATION** and **PARTICIPATION** in the world of productive work and in the social process of **DECISION MAKING**.

The described objectives could be well applied to all educational process and only the specific weight tha

each one receives in a particular relation will determine that we call it "occupational training", "public education", "formal education" or whatever. In summary this approach recognizes the social dimension of any category of human knowledge its dynamic-evolving character and its applicability in the modification and construction of the work.

Any DISASTER EDUCATION PROGRAM must fulfil these three main objectives, in variable proportions according with the "target audience" and the particular goals that each programme is trying to achieve.

THE "UNIVERSE OF INTEREST" OF DISASTER EDUCATION

We can adapt Fuglesang's statement, saying that Disaster Education is "information processing for the explicit purpose of reducing vulnerability".

Which are the social fields or "target audiences" of disaster related educational activities?

The Universe of Interest of Disaster Education is obviously SOCIETY in general. But in order to design and develop any particular programme first is necessary to determine which particular level of society we want to reach (i.e. national, regional, local), which particular sector, community or group within this level and which means, methods and approaches are suitable to transmit "valid, appropriate and acceptable" information able to provoke or release a learning process in the selected audience. We can borrow the concept of "~~MARKET RESEARCH AUDIENCE~~" ("MOTIVATION RESEARCH"*) in order to obtain a proper characterization of our target audience and ensure the effectiveness of our programmes.

* ("MOTIVATION RESEARCH" ...)

Three are the main sectors through which we can canalise Disaster Education:

- 1- PUBLIC INFORMATION AND AWARENESS
- 2- INSTITUCIONALIZED EDUCATION
- 3- COMMUNITY DEVELOPMENT

These three sectors must be seen as flexible divisions of our Universe of Interest, each or overlapping the other two in proportions that we must determine for each particular society according to its characteristics and our objectives and possibilities (resources).

1) PUBLIC INFORMATION AND AWARENESS

a) OPEN AUDIENCE: This broad social sector "consumer of information", a wide spectrum of people which only common denominator is perhaps the fact of being "receivers" of the MEDIA.

b) CAPTIVE AUDIENCES: Those groups within the open audience that could be well identified by being formally or non-

formally organised around particular interests or links.

Among them:

- civic organisations (scouts, Rotary, Lions, Radio Amateurs, etc.)
- community organisations
- Churches
- environmental groups
- consumers organisations
- trade unions
- professional meetings
- industrial security officers

2) INSTITUCIONALIZED EDUCATION

People involved (on full or part time bases in formal or non formal educational processes. Includes:

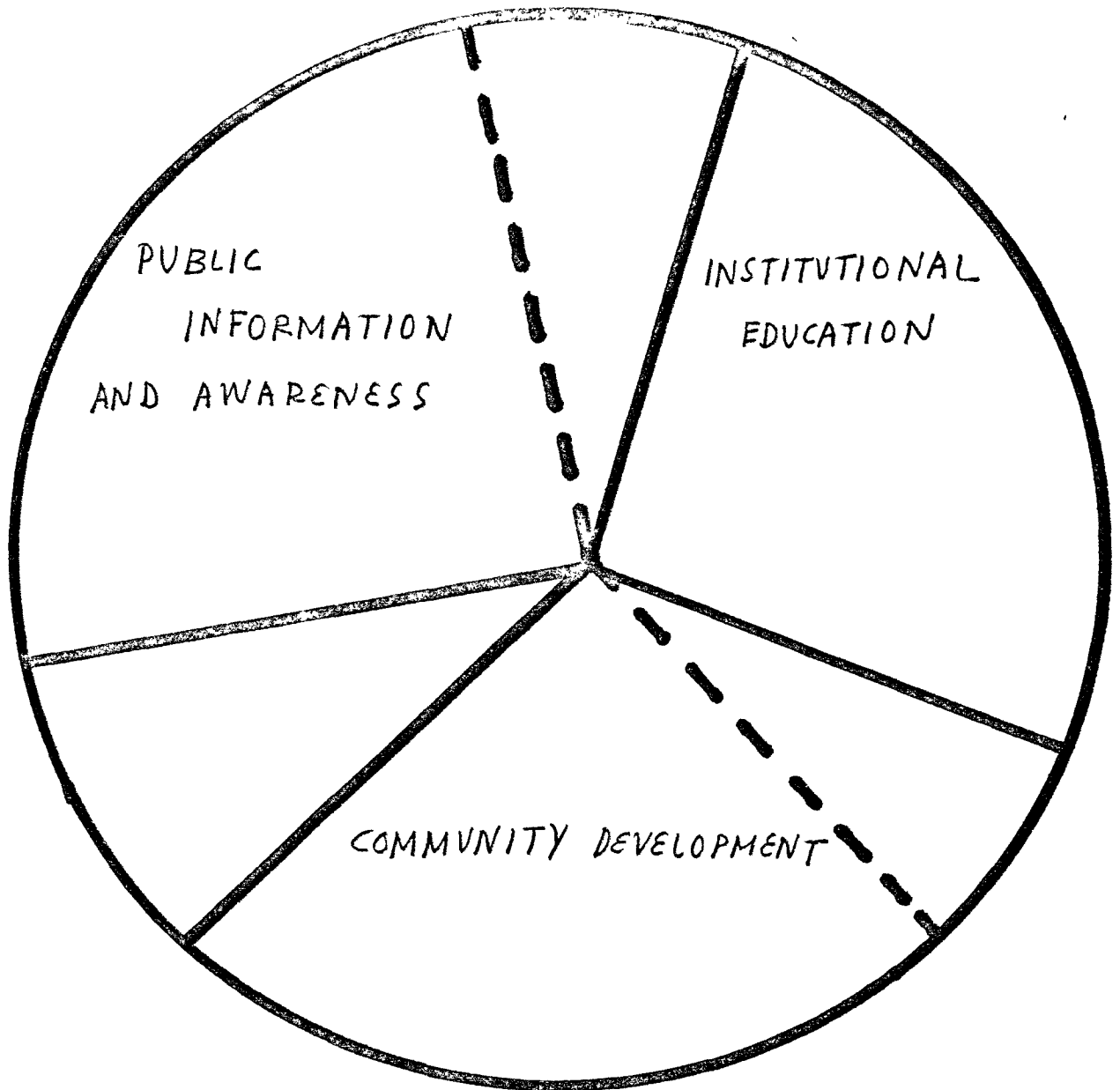
- Education authorities
- Teachers, instructors
- Students
- Workers

... PARENTS & FAMILIES

3) COMMUNITY DEVELOPMENT
Communities and agencies involved
in development programmes.

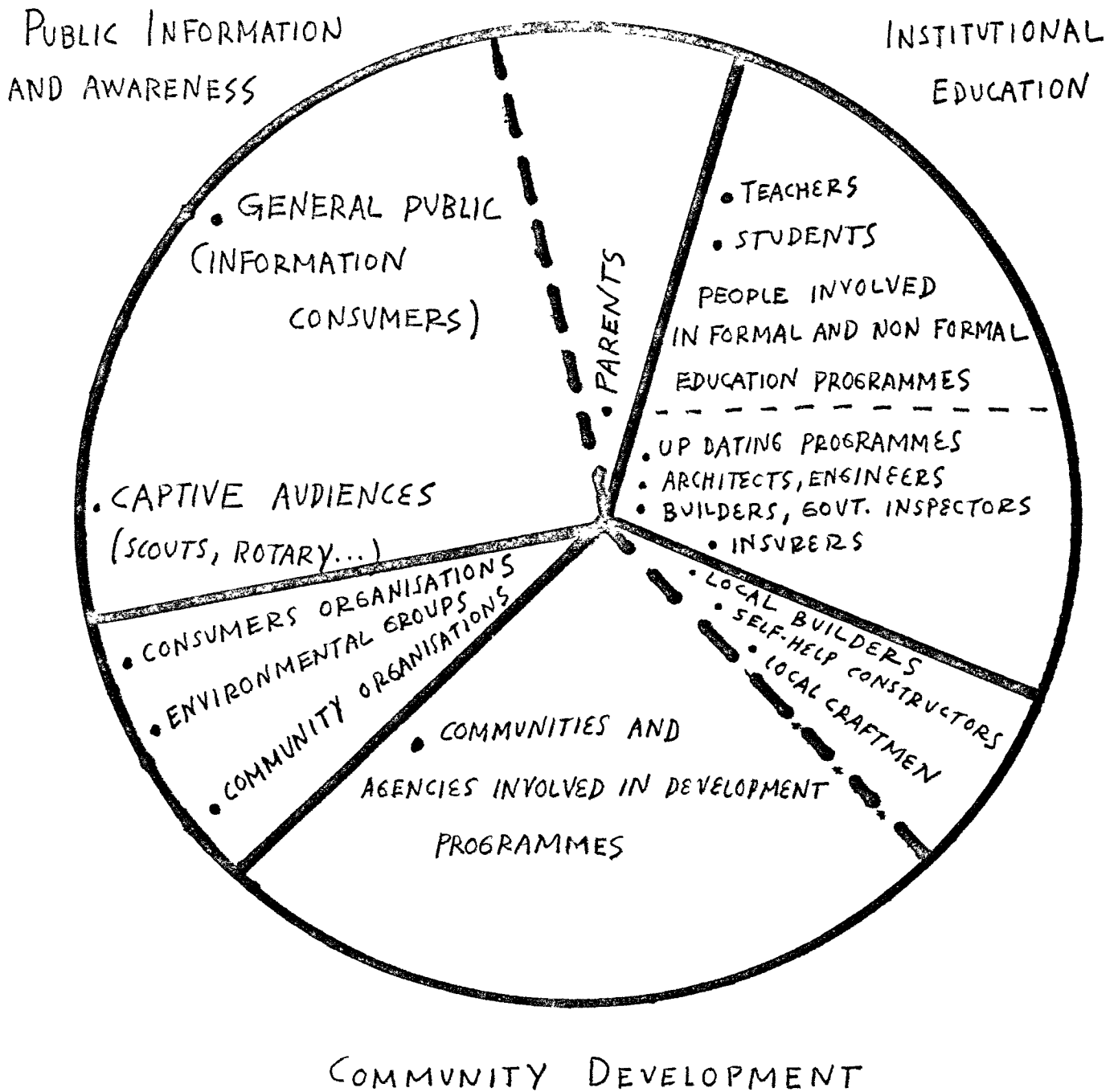
DISASTER EDUCATION #1

UNIVERSE OF INTEREST



DISASTER EDUCATION #2

AUDIENCES

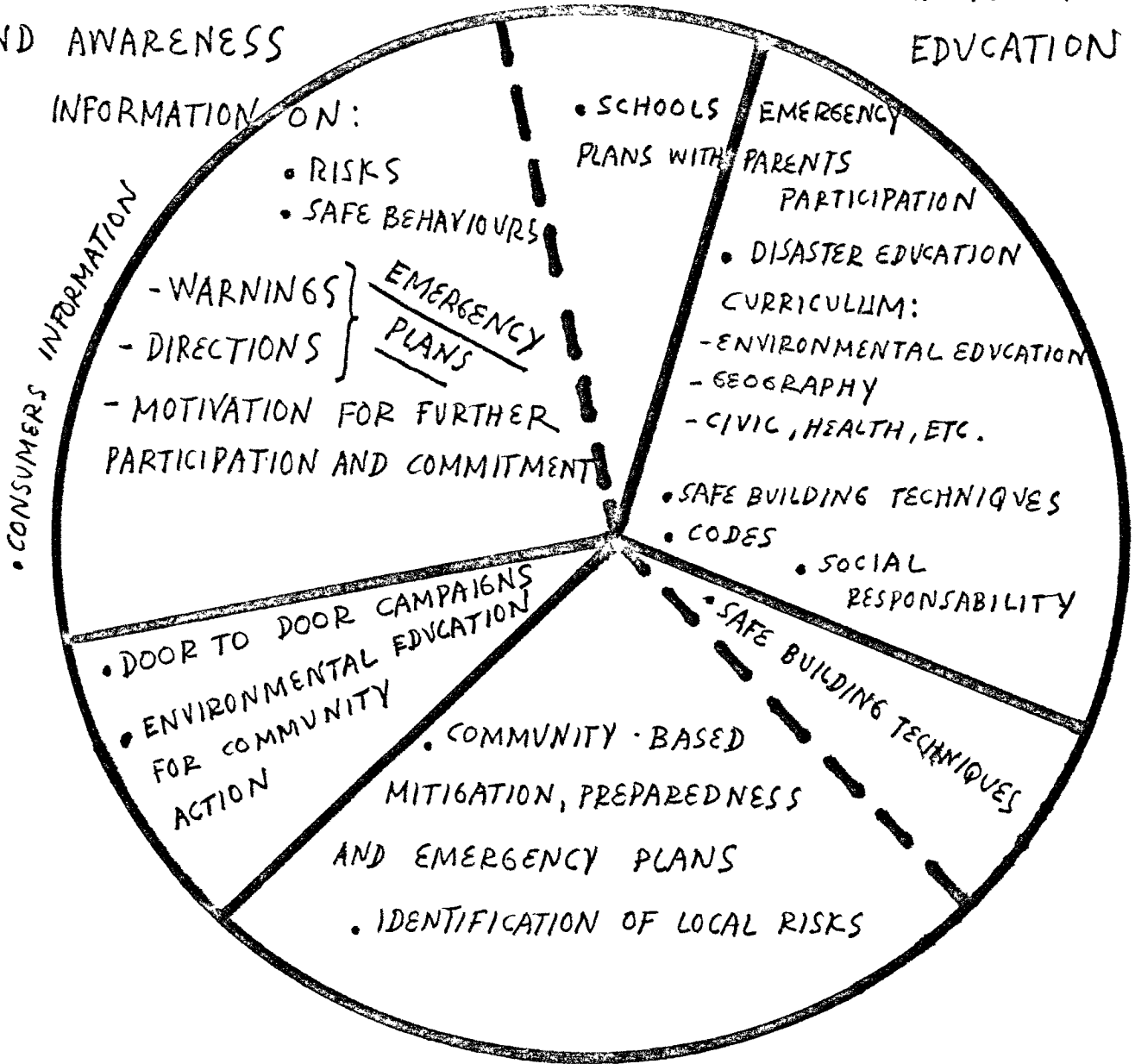


DISASTER EDUCATION #3

CONTENTS OF PROGRAMMES

PUBLIC INFORMATION AND AWARENESS

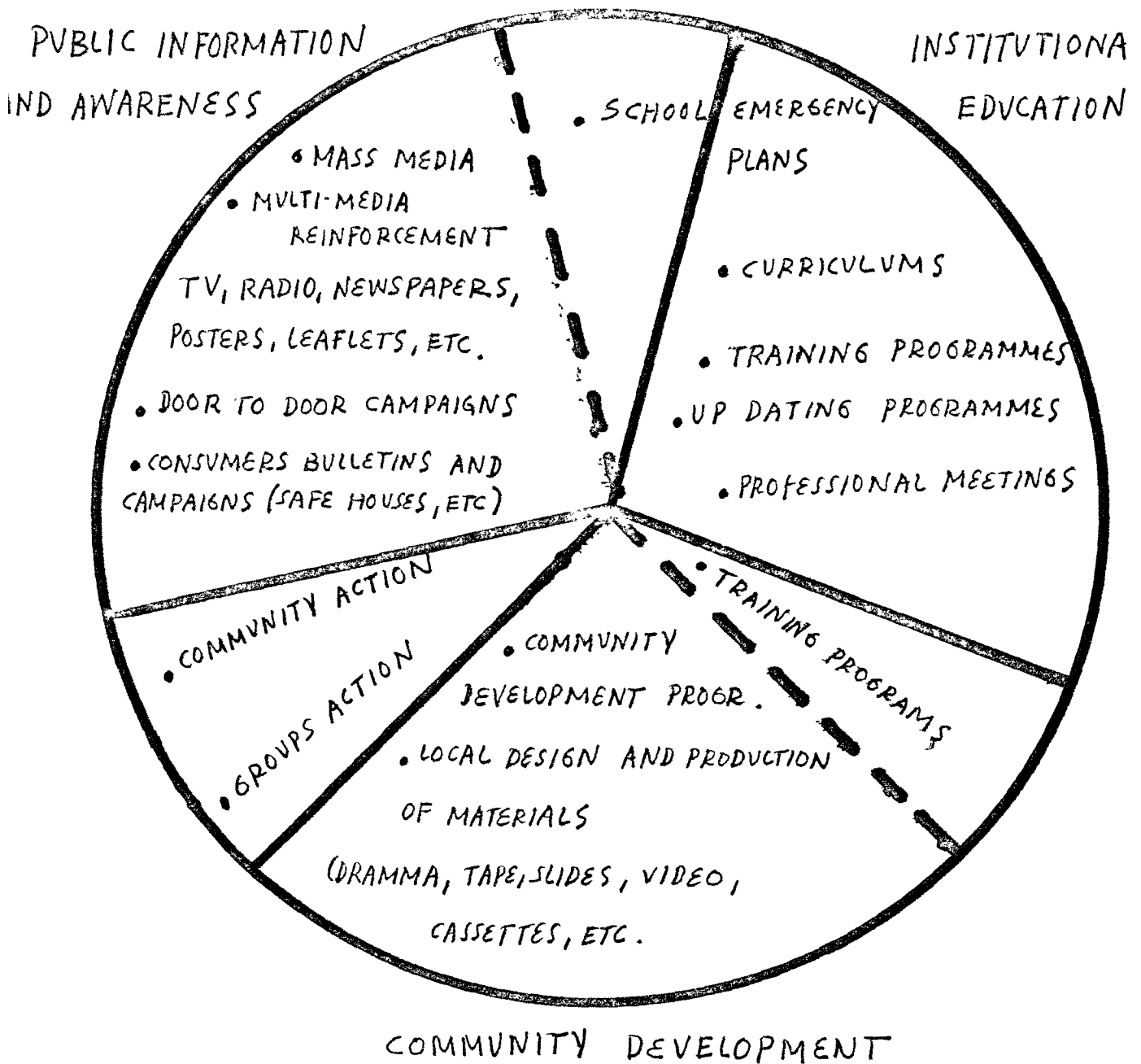
INSTITUTIONAL EDUCATION



COMMUNITY DEVELOPMENT

DISASTER EDUCATION #4

MEANS AND VEHICLES



DISASTER EDUCATION

"MOTIVATING, INTERESTING AND AMUSING"

Once we be able to dominate the principles of Education as seen through the glasses of community development by and for self-reliance and autonomy, it's important that we investigate other techniques successfully used in the fields of mass media and publicity. As a rule with no exceptions we must have in mind that Disaster Education must be MOTIVATING, INTERESTING AND AMUSING for the audience, especially because it's well known that in normal conditions this is a topic of very low priority in people interests.

The actual occurrence of major disasters makes the topic fleetingly "attractive" for the general public, not to mention the high motivation power of disasters in stricken communities (both situations of which Disaster Education must take good advantage).

Disaster Education not only tries to raise interest about a relatively unknown topic, but to motivate people to change concepts, attitudes, behaviours and techniques that - the most probable - THEY DON'T WANT TO CHANGE! That's why we have a lot to learn, for example, from Anti-smoking campaigns.

PUBLIC INFORMATION AND AWARENESS

1) As a general rule, all Public Information and Awareness Programme must be supported by a Mitigation, Preparedness and/or Emergency Plan. (The ideal is that the first one makes part of the last one).

2) ALL Mitigation, Preparedness and/or Emergency Plan MUST consider among their key elements, the PARTICIPATION AND COMMITMENT of the communities they suppose to be protecting.

3) Disaster Education ("information processing for reducing "vulnerability") is a vehicle to make possible real and effective Community participation and commitment in Disaster-related plans.

4) Objectives of a Public Information and Awareness Programme:

✓ 1° Create awareness of the existence of Risks, with the frame of environmental education programmes to explain causes, possible effects, etc.

✓ To INFORM about the existence of Mitigation, Preparedness and/or Emergency Plans and the role that communities must assume in each of them.

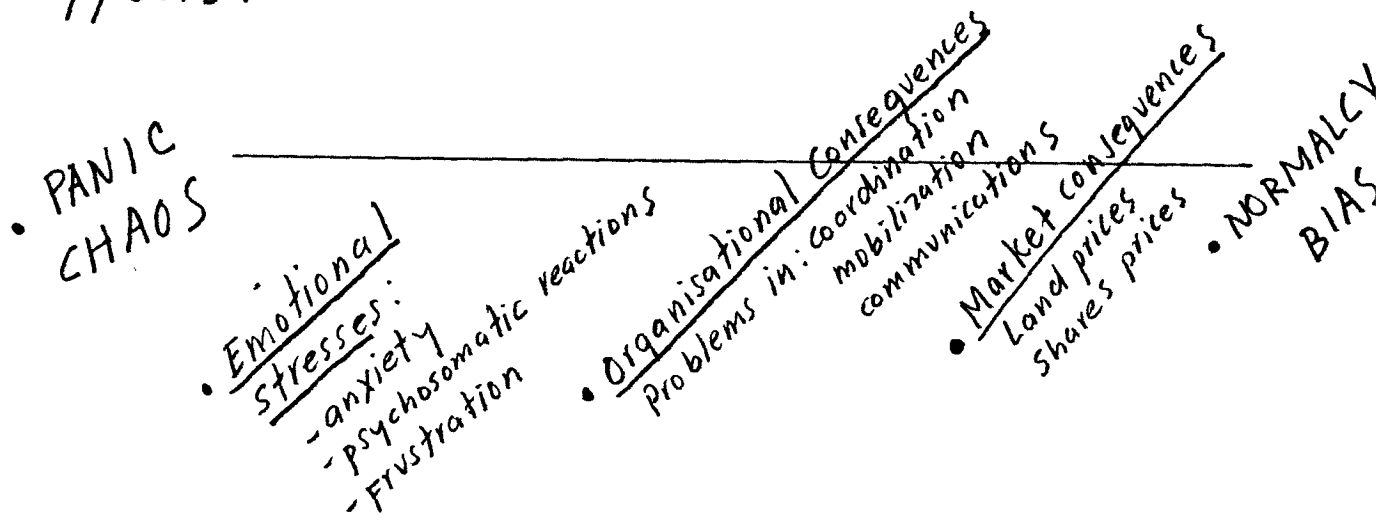
- To inform about the existence of scientific knowledges and technical measures, as well legal regulations, that could (or must) be applied in order to reduce the possible effects of the identified risks (Seismic-resisting building code,
- To instruct about behaviours, precautions and measures that must be observed and adopted in order to reduce the possible effects of the identified risks (First-Aid kits, etc.)
- To Motivate community:
 - 1- ^{for} Further participation and commitment with Disaster-related plans (TO SELL THE PLANS).
 - 2- To Demand the observance and fulfilment of technical regulations (TO SELL THE TECHNIQUE).
 - 3- To adopt measures, precautions and behaviours (TO SELL BEHAVIOURS).
- To inform the community about the meaning, importance and objectives of forecasts or predictions warnings and directives issued by the authorities before the occurrence of a potential disaster and especially to raise conscience about the importance and obligation of acting according to them.

- To stimulate new patterns of environmental understanding based in day to day experience.

- In summary, to promote a FOUNDED CONFIDENCE in the possibility to mitigate the effects of natural disasters, that is, to achieve a better adaptation of society to environmental realities and changes.

RANGE OF PSYCHOLOGIC RISKS

Disaster Educators must have in mind the range of psychologic risks involved in the execution of their programmes, especially in those addressed to the general public where information is almost unilateral and there is not always the possibility to confirm, through feedback processes that the public is receiving and interpreting the correct messages. In this case multi-media reinforcement and door to door campaigns could help to 'mitigate' those possible unwanted effects.



PANIC/CHAOS → More theoretic than real. No evidences.

NORMALCY BIAS → People's tendency to accept most readily any information that enables them to disbelieve the prediction, minimize the danger and view the

PUBLIC INFORMATION AND AWARENESS

OPEN AUDIENCE

- IDENTIFY TARGET AUDIENCE
- IDENTIFY REALISTIC OBJECTIVES
- "MOTIVATION RESEARCH": find which "audience sensitivity points" can you touch in order to fulfil your purposes:
 - Raise audience interest, relating message with the daily experience
 - Appropriate language (spoken, written, visual, pi)
 - Simple, amusing, easy to learn, easy to relate messages.
- MULTI-MEDIA REINFORCEMENT
- DOOR TO DOOR CAMPAIGNS
- INCENTIVES FOR FURTHER COMMITMENT
- INCORPORATE DISASTER EDUCATION IN OTHER ACTIVITIES OR EDUCATION PROGRAMMES.
- CONSIDER DANGERS: Over saturation / Normalcy Bias
 - Lack of Credibility
 - Public Alarm, Panic, Chaos
 - Market consequences
- CONSIDER YOUR LEGAL RESPONSIBILITY
- FACILITATE AUDIENCE FEED-BACK
- FIND HELP AND SUPPORT IN OTHER GROUPS (CAPTIVE AUDIENCE)
- TRAIN MULTIPLIERS
- BE COHERENT IN YOUR MESSAGES

COMMUNITY DEVELOPMENT

- Have always in mind that your programme is A TOOL OF THE COMMUNITY TO OBTAIN COMMUNITY GOALS and never viceversa.
- Your information and the way you transmit it are a limited percentage of the learning process. It's completed when the receiver processes it, digests it and generates external responses.
- Technical improvements towards disaster mitigation must result in short term tangible rewards in terms of individual and community well being.
- The best way to introduce mitigation measures is through the satisfaction of community felt needs.
- Disaster education / mitigation can't be isolated from broader development plans.
- Disaster education in community frame must give as results:
 - identification of local risks.
 - specify local application of broader disaster related plans.
 - development of local plans
 - commitment

MUNITY

DEVELOPMENT → ABOUT MATERIALS

- CONSIDER YOUR AUDIENCE
 - Particularities
 - Interests
 - Constraints
- ENCOURAGE FEED BACK AND INTERACTION
- BE COHERENT
- Even the most "self-explanatory" materials need discussion and explicit "INTRODUCTION"
Explain: "Game rules"
 - purposes
 - doubts
 - limitations
 - possibilities
- The best aid is REALITY

Concepts to remember:

- VISUAL LITERACY / VISUAL ILLITERACY
- MEMORY PICTURES

BUC
FORMATION
CAMPAIGNS →

WHO PAYS? (Some alternatives)

- DISASTER AUTHORITY (as part of its PLANS).
- Government : Education Authorities,
Communications authorities.
- Development Agencies (Through specific projects or as part of their regular projects).
- Charities (In particular those involved with relief or development).
- Private Sector : Publicity budget
Social benefit budget
- Media : as part of Social Interest campaigns

Among researchers and organisations involved in disaster related programmes and studies, there is agreement about the importance of community education and participation as one of the key foundations on which to stand mitigation, preparedness, recovery and reconstruction plans:

- For Davis, "Training and Education at all levels" and "Raising Public Awareness" are two of the five key elements he proposes for a "National Model of Disaster Management". (1) Davis, pag 5

- The US National Academy of Sciences' "Panel on the Public Policy Implications of Earthquake Prediction" recommends that "emergency plans should include programs for broad and active citizen involvement" (2) NAS/ES pag 17

- The UNDRO/UNESCO document on "Volcanic Emergency Management" (1985) considers community awareness "and a general desire to take collective action" as basic assumptions of volcanic emergency plans⁽³⁾. In the mentioned document they say:

UNDRO pg 38

"to be effective, they (mitigation and emergency measures) depend on the understanding and

co-operation of the community as a whole. Prompt and effective action in emergencies can be achieved only if the public is made fully aware beforehand of the nature and degree of the hazards and the consequent risks, and of what can be done collectively and individually to reduce this risks." (4) UNDRR pg 67

- For Larson, the success of warning systems depends on the knowledge gained by the public during previous phases. (5) NAS pg. 109

- Ressler express that pre-disaster planning "will not be effective until it is the community who is participating in assessing vulnerability, making recommendations for stockpiling, teaching search and rescue, developing methods of reducing vulnerability and providing people with information about disaster probability and what to do in the event of a disaster." (6) Small... pg 147

- Examples of what we may call "disaster cultures" where education to cope with events ^(such as) earthquakes is part of the community background, can be seen in China (7) and Japan (8) Time/Life pg 148
pg 131

- I have personal experience in community-based reconstruction programmes gained after the

1983 Popayán earthquake. In this particular case, community involvement through grass-roots^{level} organisation showed to be both the basic tool for self-aid reconstruction activities and the most important result of a process in which the new houses became just useful by-products of the training/organisation programmes. (9) ∈ WCh - Jamaica

INFORMATION: PREREQUISITE FOR PARTICIPATION

This paper is based on the evidence that pre and post disaster plans, programmes and activities are much more effective if they are deeply rooted in the communities they suppose to be protecting or benefiting. If this is so those communities should have an active participation in the different stages of pre-disaster planning, mitigation, and preparedness and of post-disaster relief, recovery, reconstruction and development.

One prerequisite for participation is information. Only when there is enough information available, and when this information is properly digested, individuals and communities are able to assume an active role in a particular process.

By "enough" I understand information in an amount and quality that permits a comprehensive assessment of a particular situation and of the resources available or potentially, available to deal with it. In other