WORKSHOP

GENERAL:

- 23 teachers per group.
- A self-designed pedagogical-didactic scheme will be used during the workshop. This is already hanging at the beginning of the workshop. The scheme is covered.
- The definition of a powerful learning environment is translated in advance to Khmer.
- The benches are arranged in islands. The placemats are ready.

PURPOSE OF THE WORKSHOP

The main purpose of this workshop is to present and test a self-designed pedagogical-didactic scheme.

To obtain a clear image creation of the Cambodian education, we conducted observations and interviews. During these observations, we noticed that several constituents of a powerful learning environment are being not or hardly used. The biggest differences can be found on the teaching methods, the educational relationship, the grouping and media.

As the powerful learning environment and student-centered approach are by no means retrievable and there was no question of differentiation, we decided to introduce the scheme in its entirety.

We spend more attention to the constituents where the biggest differences can be found. We try to somewhat influence the vision of education and, by the broad exposition, eliminate the incorrect interpretation of certain terms.

We also want to make the Cambodian teachers aware of the importance of creating a powerful learning environment and explain this fact with all its constituents.

Beside all this, we hope to provide materials, examples, ideas and opportunities and offer new teaching methods and media.

GOALS

- Provide a powerful learning environment with all its constituents.
- Put into practice and test a self-designed pedagogical-didactic scheme.
- Apply the student-centered approach.
- Provide ways to differentiate.
- Influence the vision on education.
- Eliminate the incorrect interpretation of certain terms.
- Raise awareness of the importance of creating a powerful learning environment.
- Offer new teaching methods, media, examples, ideas, materials and opportunities.

Introduction

- "As a teacher, you have a certain vision of education. This vision we call the frame of reference. It consists partly of a pedagogical image and partly of a society image.
  The pedagogical image includes what values and norms you have. What role does education play in the society? What do you expect from education? What vision do you have on education? What is your role as a teacher? Is a teacher the omniscient and should the students only follow? Or is the role of the student more than just that of a receiver, is he also a giver?
  The society image includes the vision you have on the role of education in relation to society. How do I look at education and society? Is the purpose of education to prepare people to serve society as well as possible? In other words, does education provide the delivery of good citizens? Or is it the human with its development that is central? Does education provide for people to develop themselves? Do you see education as product oriented or process oriented?

- The explanation of the prior is visualized using a board diagram.

- This vision is very important to dwell on.

- Question for the teachers: "What do you think is the importance of education? What is the purpose of education?".

- The teachers formulate an answer to this question using a placemat. This teaching method is briefly explained.

- The answers of the teachers are processed into in a classical mind map.

Core

- Question for the teachers: "What are good aspects to create a powerful learning environment?".

- Each teacher receives three sticky notes. Hereon they write their answers. On each sticky note they write only one word.

- The teachers form groups of four. Each group discusses its sticky notes and makes a synthesis. Subsequently, each group receives five blank (yellow) cards on which they write this synthesis. Like that each group reduces its answers to five keywords that, in their opinion, a powerful learning environment constitutes. The sticky notes are gathered and stored.

- The answers are hung on the board, per group and in columns. Again an analysis is made. Together, we check which words can be linked. All words are placed in an overarching term.

- The pedagogical-didactic scheme is made visible and defined.

- Each teacher receives a sheet with the definition of a powerful learning environment.

- Each constituent of the pedagogical-didactic scheme is further explained using concrete examples. (see Annex 1)

- The question "What are good aspects to create a powerful learning environment?" is refreshed. The teachers receive one sticky note. Hereon they write their answer in one word. Afterwards, the teachers place their sticky note on the right constituent on the scheme.

- A classical analysis is made: what is placed where, are the sticky notes hanging on the right place, must something be moved …?

- Group conversation: what can we add to it, what could possibly be adjusted?
  We engage in conversation with the teachers:
  - o Start Question: Are there, in your opinion, any key words missing?
  - o Indicate the importance of all the constituents in order to achieve a KL.
  - o Emphasize the interplay of and interaction between constituents.
  - o Provide tips and examples for each component (see Annex 2).

End

- Each teacher receives two cards. On the orange card, the teacher lists what they will take and use from the workshop. On the green card, the teacher writes some feedback about the workshop.
- On the way out, there are two 'mailboxes': a box for the 'exit ideas' and a box for the feedback.

MATERIALS

- Board diagram of the frame of reference
- Placemats
- Mind map of education
- Sticky notes
- Blank yellow cards (5 per group)
- Pedagogical-didactic scheme in colour (A0)
- Pedagogical-didactic scheme in colour (A4, one for each teacher)
- Sheet with the definition of a powerful learning environment (in Khmer)
- Blank orange cards (exit ideas)
- Blank green cards (feedback)
- 2 'mailboxes' (exit ideas & feedback)
- Pens
- Whiteboard markers/chalk
- Multiplication table cards
- Step-by-step cards
- A clock with movable hands
- Plane figures
- Dices
- A, B, C – cards
- Drawings
- Concrete materials: bottle caps, balloons, straws, shells, rocks, leaves, etc.
- Placemat
- Mind map
- Talk tickets
- Memory
- Bingo
- Domino
- Traffic light

Powerful learning environment

Learning is an active constructive, cumulative, self-regulated, goal-oriented, contextual, cooperative and individually different process of knowledge acquisition, meaning and skill development (De Corte, 1996). A powerful learning environment involves "designing, realizing and evaluating situations that provoke and trigger the required learning processes to effectively achieve the desired learning outcomes.

Frame of reference

This constituent has already been explained during the introduction of the workshop. The teachers articulate their own educational vision.

Initial situation

The teacher collects the necessary information to get a clear view of the possibilities and limitations of the students. The teacher should reflect on the next matters:

- *Foreknowledge:*
  - o What do the students already know? What do they not know yet?
  - o The foreknowledge is of great importance. Research shows that 30-60% of the differences in results among students are determined by the foreknowledge. Take the time to verify all the students necessary foreknowledge before teaching.

- *Strengths and weaknesses:*
  - o What are the strengths and weaknesses of each student?
  - o Are there any students with special needs and/or (learning)disorders?

- *Motivation and interest:*
  - o What motivates the students? What are the interests of the students?
  - o Try to join the children's 'world', their environment and perceptions. This way you provide a realistic starting point and more recognition.
  - o If you connect to the interests of the students, the motivation will increase and the attention of the students will be more focused on the lesson.
  - o Provide a nice introduction, excite the children. Create tension, take the students along in a story.
  - o For example: lesson about animals. Start the lesson with an exciting story about visiting an animal park. Tell the students which animals you have seen. Empathize with the story. Ask the children if they know any other animals. Use humour and fantasy.

- *Learning style:*
  - o How do the children learn?
  - o How do they process the learning content? How do they store it in their memory?
  - o What feelings arise while learning?
  - o Each student has its own capability. For example, one student remembers better when the material is being presented visually. The other remembers better when the material is being presented aurally. Provide a variety or combination of both.

- *Social Economic Status (SES):*
  - o What is the home situation of the pupils like?
  - o To what extent does the child get stimulated at home, by its parents?
  - o What about the educational level of the parents?

Goals

With each lesson, you as a teacher, need to keep certain learning objectives in mind. At the start of the lesson you should know what you want to achieve by the end. These learning objectives always need to be determined in advance.

It is important that both the teacher and the students know the intended learning objectives. This is done to inform the students, to find and offer suitable teaching and training materials, to know what needs to be achieved and as a means to develop a good study method.

At the beginning of the lesson, you always need to give the learning objectives. That way, the students know what is expected of them.

Ask yourself these questions:

- What do I want to accomplish at the end of the lesson?
- What do I want the students to know/be able to do at the end of the lesson?
- What do I expect from the students?
- How can I best do this?

Upon reaching the learning objectives, try to break free from the manual (workbook). Look for new features. Let your inspiration run free.

Remark: in Cambodia, the curriculum is translated into in a manual for the teacher and the student at the same time. MoEYS imposes the teachers to fully process this manual by the end of the school year. There are only specific final attainment levels, curriculum objectives and goals for grade 3, 6, 9 and 12.

Learning content

After determining the learning objectives, the learning content can be selected. This includes the knowledge and skills to be handed during the learning activity.

Take plenty of time to repeat the learning content, but avoid loss of time by dwelling too long on learning content that the children already possess.

Media

Among media we mean the didactical teaching aids that are used to promote learning and teaching. This material aims to support the learning process. It is important to choose the materials consciously as a function of the lesson so that students could achieve the learning objectives and this each at their own level.

Teaching methods

A teaching method includes the method used to transfer the learning content as efficiently as possible and to achieve the learning objectives. It is the way they are working towards the learning objectives.

The teaching method should meet the lesson topic and consider the differences between students. There are several methods to use. What kind of method you choose, it is of great importance that students are being active. Children learn by doing.

Demand for the teachers: how do you interpret 'students are working actively?

Explanation: Active learning means that the pupil is actively working on the acquisition and integration of learning contents. With the applied knowledge there are social and practical skills associated with that enable the student to take control of the own learning process. They will learn better by discovering things themselves, by applying knowledge in practice, by asking questions, by discussing, by trying things out and coming up with examples.

Examples of teaching methods are: telling, demonstrating, class conversation, group discussion, group work, roleplay, self-tuition, practicum, homework and game-types (to be explained later).

Teaching methods can be divided into the following categories:

- Offering methods and/or instruction methods
    - **Profess**: oral transmission of learning content in which the core is on the listening behaviour of the students.
    - **Demonstrate**: presenting learning content through visualization (tasting, multimedia …).
    - **Tell**: bringing texts, poems, stories ….
- Interaction methods
    - **Educational learning conversation**: strongly guided conversation where students are invited to think themselves through a series of logically successive questions, in a desired direction by the teacher to arrive at certain insights.
    - **Class conversation**: mainly process-oriented conversation conducted by mainly the students who communicate directly with each other. The teacher remains in the background. They work towards a problem and it is aimed at communicating personal experiences and thoughts.
    - **Learning conversation**: a conversation (individual or in group) about the learning experience of the student. The teacher plays the role of moderator and remains in the background. Also called evaluation interview or discussion method.
    - **Group discussion**: thinking and combining knowledge, ideas and opinions in group in order to learn from it. A discussion leader will be appointed (teacher or student) to lead the discussion but not intervene substantively. The group discussion proceeds in distinct phases (posing the problem, defining the subject, decomposing the problem, search for solutions, discussing the proposals, formulate a conclusion).
- Cooperation methods
    - **Teamwork**: cooperative learning, steered by the teacher. The students work together to learn.
        - → *Demand for the teachers*: how do you interpret 'teamwork'?
        - → Why can 8 students not make one long division?
            How can you fix this? How could it be otherwise?
            How can you make the students learn from each other?
            How can the students work together more and better?
    - **Variants of teamwork**: playful learning using a brainstorming, mind map, duos, Pictionary, Memory, dice et cetera.
    - **Problem-based learning**: cooperative learning, steered by the students. The teacher guides, supports and asks stimulating questions. He will only contribute substantively if needed. The students acquire and integrate knowledge, attitudes and skills on the basis of a problem.
    - **Simulation**: a roleplay within a well-defined structure. The roles are linked to conditions and requirements. For example: a phone conversation.
    - **Roleplay**: empathy game in which the student enters into a certain role. The student takes on a different role. For example: re-enact a story or text.
    - **Case method**: concrete, realistic situations are first analysed individually. Then the visions are discussed in group. Afterwards, the own vision is adjusted.

- Individualizing methods
    - **(Guided) independent learning**: the student works and learns independently. The teacher supports the student while working.
    - **Lab practicum**: all students perform (individually or in group) a practical activity with the aim to illustrate something, examine or exercise. For example: an experiment.
    - **Self-tuition**: an individual program in which the student carries out a number of ordered study tasks. The student keeps track of his own progress by performing the tests included in the package. The final test is made available by the teacher at the appropriate time.
    - **Contract work**: the student must complete a number of tasks within a specified period based on an individual 'contract'. The student decides about the duration and sequence of processing tasks.

Grouping methods

This includes the dividing of the students during the activity. The students can work classical, in groups, in pairs or individually.

The students are divided according to level or interests. If you put together students with the same level or the same interests, we speak of a homogeneous group. When a group of students with different levels or interests are put together, we speak of a heterogeneous group.

We prefer heterogeneous groups because the students thus learn more from each other.

Educational relationship

The relationship that exists between the teacher and the students determines how the learning of the students will be. A good relationship between teacher and pupil is therefore particularly important to have a positive influence on the learning process. As a teacher you also have an educational role.

Questions you should ask yourself as an educator are:

- How do I see myself as a teacher? (a leader, a coach, a supporter)
- What values do I want to teach the students?
- What do I think about punishing and rewarding? How do I sanction?
- What behavioural characteristics do I find important? (friendliness, respect, clearness …)

Evaluation

Evaluation is an unmissable part in everyday teaching. On the one hand evaluation can help and guide the student. The student receives feedback on its strengths and weaknesses and can adjust its own learning process based hereupon. This is called formative or process-oriented evaluation. On the other hand evaluation is used to assess students. This is called summative or product-oriented evaluation.

It is of great importance that the teacher gives enough feedback, both focused on the process and the product, both during and at the end of the learning activity.

In addition, the teachers as well as the students should reflect on the work carried out. Have students reflect on their own performance. Questions they can ask themselves are:

- How have I experienced this lesson?
- Where in my learning process am I right now?
- What went well? What was difficult?
- What do I take with me? What can I use during the next lesson?
- What will I do differently next time?

Learning content

Question for the teachers:

- "Are there any subjects that you consider important but that are not included in the curriculum?".

Subsequently we suggest the next subjects:

- history
- the continents (and countries)
- children's rights
- International Women's Day

Media

Besides the blackboard, whiteboard and educational posters, there are a lot of materials that you can easily make yourself. Besides, you can use the materials to excite the students in a fun way and to support, motivate and differentiate. Some examples are:

- **Multiplication table cards/spelling cards**: cards meant for students who experience difficulties with the multiplication tables or spelling. Stick the card to their bench, so they can always consult it.
- **Step-by-step cards**: cards meant for students who experience difficulties with structure. The step-by-step cards can be used to solve problem questions.
- **A clock with movable hands:** so the hour is presented visually and clock reading can be practiced.
- **Plane figures**: provide small plane figures for each student. That way you keep all students actively engaged.
- **Dice**: a dice is a fun and easy object for practicing various topics: math, vocabulary, reading ….
  For example: there are two dice. There are six numbers written on each dice. Two students come in front of the classroom to cast the dice. The cast numbers are summed up by the students.
- **A, B, C – cards**: the teacher asks the students a question (or gives an exercise). Next, the teacher shows three possible answers (A, B or C). The students hold the card in the air with the letter that, according to them, displays the correct answer. These cards can be used repeatedly in various play forms.
- **Drawings**: to use during exercises and stories (operations, problem questions, arithmetic …). By using drawings/prints you provide a visual representation.
- **Concrete materials**: caps, balloons, straws, shells, rocks, leaves, etc. can be easily used in class.
  For example: caps are used while using the multiplication tables. Have students put the caps into groups according to the multiplication table.

Teaching methods

Examples of teaching methods:

- **Placemat** (has already been explained and used during the introduction).
- **Mind map**: used to work out and display a specific topic clearly. This can be done individually, in pairs or in groups.
- **Teamwork**: when the students have to perform a task in group, you can assign each group member a personal task.

For example: reporter, penman, timekeeper, material master …. That way every student has an own responsibility and they work simultaneously together.

- **Talk tickets**: when discussing in groups, give each group member two talk tickets. If a student wants to say something, he/she puts a talk ticket in the middle. Next, he/she is allowed to speak for one minute. The students are required to use both talk tickets. That way everyone contributes, they listen to each other and each student speaks the same length.

- **Inner and outer circle**: the students form an inner and outer circle. They are arranged so that a student of the inner circle is standing in front of a student of the outer circle. The teacher gives a subject on which the students have to talk about (for example: introduce yourself in English). When the teacher gives a signal, all students of the outer circle move up one place. The students of the inner circle don't move up. Tis way they are faced with a new student and they start a new conversation. In this way, all students are simultaneously engaged and the exercise is practiced several times.

- **Pairs:** the students pair up. Both students makes an exercise (a different one). Next, they exchange their exercise. The students check each other's exercise.

- **Memory**: an even number of cards, of which there are always two belonging together, are laid face down. In turn, a group member takes two cards of choice and displays them. If they match, this group member may keep the cards and try again. If they do not match, the turn goes to the next group member.

- **Bingo**: the students receive a bingo card. On this card, there are imaged several options. The teacher shows or says a task, problem or exercise. If the solution or the requested is imaged on the bingo card, the students strikes it through. When all images on the card are stroked through, the student shouts 'Bingo!'. This student then wins the game. The bingo game can be played by two as well.

- **Domino**: the students receive several domino blocks. They link the exercise on one half of a domino block to the solution on the other half of another domino block.

Grouping methods

There are several ways to form random groups.

Pairs:

- Make cards with pictures/names of famous duos: Winnie the Pooh and Piglet, the king and queen …. Divide the cards. Next, the students try to find their partner.

- Find someone who …: has the same eye colour, has as many brothers, 's birthday is in the same month, 's first name starts with the same letter, also loves apples ….

Larger groups:

- Cut several photos into as many pieces as you want there to be groups. The students make the puzzle. Like this, they form a group.

- Write titles or the first line of a song on several notes. Each student receives a note. When the teacher gives a signal, all students start singing their song. That way, the students find their group members and form a group.

- All students receive a note whereupon a sport is written. The children portray this sport. Who portrays the same sport, belongs together.

- Making sequences: stand by age, height, house number, alphabet …. Next, divide the group by 2, 3, 4 ….

Educational relationship

As the classes here are huge, it is often difficult to keep the children attentive. However, there are several ways to provide more structure in the classroom:

- Set **classroom rules**. You can choose define these yourself or in consultation with the students.
  - For example: raise your hand to talk, listening when others are talking, follow directions, keep hands, feet and objects to yourself, stay in your seat ….
- Set a **reward system**. This motivates the students to work well. When the student shows a good attitude, he/she is rewarded with a point, stamp, sticker ….
  - For example: stamp cards. Each student has its own card. When the pupil cooperates well and/or does his best, he/she receives a stamp. When the card is full, the student is rewarded. What this reward includes, is up to you. This could bet that the student can choose a song to sing or a game to play.

As a teacher, you possess several behavioural aspects. Research shows that students see the following behavioural aspects as the most important: giving feedback, clearness, friendliness, positively confirm, consequence and provide structure. It is therefore important as a teacher to take this into account.

Evaluation

Evaluation can be used to assess the students. The evaluation must be adapted to the individual needs of the children.

For example:

- A student with reading problems takes a test orally.
- A student with reading difficulties may read a dictation in advance.
- A student with learning disabilities gets more time to take a test or gets less exercises.
- A strong student gets less time to take a test or gets more exercises.

In addition, it is important that evaluation also takes place during the process. It should not always be assigned a score. For example: you give the students an in between exercise. This exercise is used to see where the students stand at that time. Do they understand the learning content? Do I have to repeat it?

Using formative evaluation, the students gets an idea of the progress of the learning process. This way, he knows where he stands at that moment, whether he is going in the right direction and how to adjust his own learning process.

To evaluate summative you can use different question types. It is important to apply a variety of these types.

Question types:

- **Short answer question**: the answer is limited to a number, a word, a short sentence or phrase.
- **Multiple choice question**: the teacher asks a question and then gives several possible solutions. It is up to the students to mark the correct answer.
- **True/false question**: the teacher gives a statement or an exercise with an answer. The students indicate whether this is 'true' or 'false'. If desired, they argue their response.
- **Essay question**: the answer is produced entirely by the students. For example: the students write a text of 7 lines about 'when I grow up …'.

In addition to evaluating is reflecting, mainly self-reflection, also of great importance. There are different methods to reflect with the students:

- **Dreamcatcher**: the teacher throws a ball of string to a student. This student gives his findings on the lesson. Next, the student throws the ball of string to another student, but hereby the student holds a piece of string. In this way a large dreamcatcher arises.
- **Traffic light**: the teacher hangs a traffic light on the board. The students write their findings on a note and stick it on the traffic light (Green= good, orange= mediocre, red= not good). Afterwards, the answers are discussed.
- **Reflection ball**: the teacher throws a ball to a student. On the ball there are several reflection questions written. The student chooses one question and answers it out loud. Next, he throws the reflection ball to another student.