

"Tactics and strategies, ideas and tools for Teaching PNF"

Introduction:

The **aim of these topics is to help IPNFA-assistants** to give them ideas on important aspects of teaching. These ideas come from experiences from different PNF-instructors and assistants as well from literature as the mentioned classic book by Babara Gross Davis.

We like to offer strategies about course goal establishment, preparation of the syllabus, the importance of the first course day, a open discussion atmosphere, discussion skills, questioning, handling with bright and less capable students together, lectures and lecturing and alternative methods like workshops and demonstrations.

1. Establish goals:

We have to list the goals of our different courses. The objectives of each course level are a part of the IPNFA-regulations. See the objectives on our new website: www.IPNFA.org. in the members area under the Education Committee Section.

Goal setting helps

- to clarify what we want our students to accomplish
- to select the appropriate teaching or instructional methods and materials
- to list and plan the goals in the available time
- to distinguish between basic, recommended and optional course material or contents
- to consider a range of criteria in selecting readings

2. The Course Syllabus:

A syllabus handed out on the first day of class or earlier, gives your students an immediate sense or impression of what the course includes and it clarifies important contents. It could include required reading / preparation. Add a recent literature list and references. Refer to the IPNFA-site for PNF-articles. A written preparation can minimize misunderstanding, stimulates uniformity and structure and shows course members that you take your teaching seriously.

General strategies to make your syllabus:

- Use the existing parts of the common IPNFA-script and integrate it in your own script. Find the common script on the members area under the Education Committee Section.
- Look over different syllabi of other instructors.
- Select a conceptual structure for your syllabus: a logic order of the arranged topics; (structure can follow the different topics, the course program or the chapters of the PNF-book)
- Keep the syllabus flexible, adjustable. Prepare it as workbook.
- In this digital world, students like more and more a digital version of your script. Up to you to decide about a print version or digital version for the course members.
- Add a table of the course contents; add or prepare working sheets, supplemental readings and important web sites. You can give them the working sheets, readings and sites also later on during the course.

- Start with an overview of the course purpose: what will course members know or be able to do better after completing this course. Add learning goals or objectives. Prepare to check before the end of the course if you have achieved these goals.
- Provide all basic information and terminology.
- Include a list of the course members, the course schedule, the course (IPNFA) rules and information about your expectations and the desired work load.
- Anticipate the general questions that will be in the mind of course members.
- Prepare evaluation sheets you like to offer them at least 2 days before the end of the course.

3. The first course day:

The first day sets the tone of the rest of the course. The enthusiasm of the instructor stimulates students' curiosity. Important tasks of the first day are clarify the course expectations, handling organization matter and create an open friendly classroom atmosphere.

Strategies to succeed in these goals are:

- Anticipate by visiting the classroom before the start of the course. Check all audiovisual equipment, the lighting, the ventilation and the organization or set-up of the classroom.
- Arrive early on the first day. Start and finish on time.
- Build a sense of community from the beginning. Course members tend to respond more positively if the instructor treats them as individuals.
- Introduce yourself, add some personal information and express your motivation on why you like to teach this course or topic.
- Let the course members introduce themselves for the group and ask for personal experiences and expectations.
- Ask them to write down their personal wishes and collect this important information.
- Try to know all members by name (first name) as fast as possible. Name tags, stickers or a seating plan will help. It is not only more polite but it gives you better control (discipline) of your group. If somebody is talking it is more effective if you can address him/her by the name (Do you have any questions/problems George?) instead of an anonymous "would you be quiet please"
- Hand out and discuss the course syllabus, the schedule.
- Give basic information about the course organization like hours, breaks, food, books and toilets! 😊
- Clarify your wishes and expectations from your students.
- Don't forget that for many students, the instructor's enthusiasm about the course material is a key motivator for learning.

4. Teaching: work constantly on an open discussion atmosphere by:

- Plan an icebreaker activity early in the course to open the course atmosphere.
- Emphasize the importance and respect for different approaches, viewpoints and experiences. Remember that these persons are professionals with a diploma.
- Respect each student for who he or she is. Respect differences in culture, in socioeconomic backgrounds, nationality or language.
- Avoid black-white viewpoints or discriminatory remarks.

- Course members need to feel free to voice an opinion, so encourage all to participate on the class discussion.
- Stimulate passive, still or shy course members by eye contact or personal questioning.
- Consider that working in smaller groups is easier for a lot of students to speak up. Small groups stimulate participation.
- Be sensitive to course members whose first language is not the course language.
- Informal contacts with and between your students stimulate collaboration.
- Make sure to keep contact with all students. There is a tendency to address the same persons during a lecture or presentation. This can give the impression that you are talking only to part of the group. If you try to make eye contact with everyone, general attention will be better.
- Look for an adequate balance between informal contacts (during breaks and afterwards) and a positive distance to your course members.
- Try to teach with humor.

5. Leading a discussion:

Initiating and sustaining a lively, productive discussion are among the most challenging of activities for an instructor. Here some strategies:

- Keep in mind the purpose of the discussion.
- Explain the basic rules for participation, like raise your hand to speak and speaking time.
- Give time to prepare the discussion (for example mini-workshop in sub- groups) or use brainstorming.
- Start the discussion with prepared questions or statements.
- Keep the discussion focused.
- Try to stimulate everybody to participate by eye contact or personal signs.
- Involve everyone through questions ("Do you agree, Marcella?")
- Use and be aware of nonverbal cues and body language. (For example smile expectantly to somebody)
- Reintroduce overlooked comments or topics into the discussion.
- Correct wrong answers tactfully.
- Step in and ask for alternate viewpoints if some of the course members monopolize the discussion.
- If emotions are setting too high; don't be afraid to make a short break (5 min.) for everybody to go out and relax.
- Discourage students who monopolize the discussion. Avoid making eye contact with the talkative persons.
- When there are difficult questions, for example, you are not certain yourself, or the situation is antagonistic, hand the question to the group and let the group react or answer this question. Ask the group if they agree or disagree with his opinion. This prevents personal confrontations and the group can support you, and you have time to think! ("A good question for/on the floor! What do you think?")
- If the monopolizer is a serious problem, speak to him during the break.
- Watch the emotional tone of the discussion.
- Close the discussion with a summary of all major points and finish with a positive conclusion.
- If participation is too low find out the reason (like culture, shyness or control)
- Look for discussion in smaller groups when people feel then freer to talk.

6. Asking and answering questions:

Asking and answering questions are central to the learning process and to effective training. Asking questions stimulates attention, arouses curiosity and gives you the opportunity to emphasize important points.

Preparation and strategies of questions:

- Plan key questions in advance, depending on the topic.
- Will you pose questions to the whole group, to pairs or small groups?
- Will the question be a prompt for brainstorming, consensus building or discussion?
- Watch the manner in which you ask questions and treat responses. Give the impression you are seeking knowledge and not interrogating the class.
- Ask one question at a time. Avoid yes/no questions. "Why" and "how" questions stimulate the students' thinking.
- Ask a focused question keeping the topic and give time for an answer. Don't interrupt the answers.
- Praise correct answers and tactfully correct wrong answers. Let other course members correct or add the answer; this is better than correcting it yourself.
- Stimulate student-to-student interaction. (Marcella said this, but Monica had a different opinion, so...?)
- Also use questions for feedback about students' understanding.
- Use probing strategies or follow-up questions. (For example: how to plan a PNF-treatment sequence after a meniscus operation?)
- Questions can change the direction of the discussion. For example from abstract to concrete, from theory to practice or from specific to general. (Can you give us a specific or practical example? Can you show me what you mean? Can you summarize this topic?)

Levels and types of questions:

Be aware of all kind of questions you can ask:

- Exploratory questions for facts and knowledge: "What evidence based articles support PNF?"
- Challenge questions for conclusions and interpretations: "Is there other reasoning to explain the advantages of this PNF-technique?"
- Relational questions: "Why patients learn faster with Rhythmic Initiation than only with verbal commands?"
- Diagnostic questions: "What can be the cause of the hyperextension of the knee?"
- Action questions: "Who would like to demonstrate this facilitation of the trunk?"
- Cause-and-effect questions: "Is approximation in this situation effective for his postural hypotonus?"
- Priority questions: "What are important points for manual contact?"
- Summary questions: "Who likes to repeat for us all five variations I was showing you on the mats?"

Answering students' questions:

Answering students' questions is harder than posing good questions. Encouraging questioning is important for an open dialogue and a positive approach stimulates students' curiosity. Some strategies:

- Thank or praise the course members for his question.

- Make sure everybody of the group is understanding (acoustically) the question
- Repeat the question (only) if necessary. Clarify the question for yourself or for the group if unclear.
- Encourage or help the student to find the answer by himself. You can do this by step-by-step points toward an answer.
- When responding, talk to the whole class.
- Check if the question has been answered satisfactorily.
- When students raise complex or tangential questions (irrelevant for the group), ask them if you can answer the question at the end of the course hour.
- It is sometimes better to let the students answer their own questions. "If a colleague of yours asks you this, what would you answer to him?" You may ask the questioner back or pass the question to the other participants. In this way you can increase the students' participation and stimulate them to use their own thinking to solve a problem. But do not use it as a regular thing. This might lead to a point that no one will ask questions anymore.
- Be diplomatic with difficult questions and questioners: look for the class's empathy and try to win the class's goodwill
- Don't be afraid to say I don't know the correct answer.
- Some students ask questions to test the instructor or to demonstrate their own knowledge. Cut off students who want an extended dialogue with a compliment or an invitation. ("You've made a number of good comments")
- Do not intimidate students who ask a "stupid" question, even not with your body language or mimic.
- Show patience in answering the (same) question.

7. How to handle with very bright and less capable students in the same class:

- Make your expectations explicit during the first days.
- Identify early on students who may have difficulty in the course.
- Let the course members know or feel, direct and indirect, how well they are doing.
- Give frequent short in-class assignments: pose a question or problem and ask students to respond in writing, and then have students to correct their own answer or their neighbour's.
- Give the weaker course members the opportunity for extra exercises or explanation (exercise group after the course?)
- Give a pre-test during the first days to stimulate weaker course members.
- Give basic reading essentials to participants to help all succeed in class, but also in-depth reading and supplementary materials for students who wish to delve deeper.
- Ask pointed questions during the class to evaluate how well they are grasping your course material.
- Try to evaluate students' notes of your lectures, as feedback for your self.
- Have short quizzes on material covered to allow the participant to test their own learning. This will also allow you to see where weaknesses may be. Not only the students', but also what has not been clear in your teaching. The quizzes do not count towards pass/fail of course. They are only as check points.
- Use snowball questions: multiple answers are possible, so also bright students will benefit of these questions. (For example: What are appropriate positions on the mats for patients with extension spasticity?)
- Encourage students to learn from each other. Change partners frequently.

- Encourage your best students indirect: let them demonstrate; let them guide small groups or workshops; let clever members help the weaker once.
- If it is always the same good/motivated student who answers your questions promptly, stop him/her politely otherwise the rest of the group will stop to respond to your questions. (For example with a smile: George, you have already given five good answers today! Why not take a rest for today to give the others a chance to answer my questions too. Tomorrow you are welcome to answer my questions again!)
- Strong or bright students can be challenged by additional task. For example "those of you who are finished with practicing this pattern (in supine) can try to figure out what it is like in side lying or sitting"
- Try to find, by observing and listening, the difference between shy course members and less capable people. Try to support the weaker once.

8. Lectures strategies:

Preparing lectures:

Preparing lectures takes planning and organization. Being comfortable with the topic or with the material is necessary. Don't plan to lecture for a long period, because the students' attention span is maximum twenty minutes. To maintain attention and concentration, plan to break the monotony and change the pace (teaching methods or strategies) every fifteen minutes. For example: ask course members to solve a problem at their seats or in small groups, give a demonstration, use an audiovisual aid, or tell a story, joke or anecdote. Don't forget that lecturing is as effective as other instructional methods, such as discussion, in transmitting information but less effective in promoting independent thought or developing students' thinking skills.

Some ideas for your lecture preparation:

- Decide what content you wish to cover.
- Estimate the amount time. The time is given in the course program. This is always a problem. You have to fit your lecture and content into the given time structure!
- Place the topics in a meaningful sequence. This can be thematically, chronological, spatially, ascending or descending, by cause and effect or problem and solution (For example: the sequence or order of the PNF-techniques)
- The lecture or course structure has to be clear for your students. Describe this structure in the syllabus. Always define the content of the lecture at the beginning.
- Prepare and write down facts and vivid examples.
- Watch specially the opening and ending. Begin and end with a summary statement. Set the goals during the introduction and check your archived goals at the end of the course or lecture.
- Prepare variations of lectures: like the expository lecture, interactive lecture, problem solving, demonstration, case study, short lecture to prepare discussion.
- Avoid reading your lecture from a prepared text. This prevents you from maintaining eye contact with the students; it cast your voice downward and is disengaged for your students. Better use outlines of key words.
- Don't overload the students with your power-point presentation. Keep the information focused. Too many folios are confusing. Fill in practical examples even in theoretical lectures: e.g. links neurophysiology to techniques....

Lecturing:

Lecturing is a special form of communication in which voice, gesture, movement, facial expression and eye contact are very important for students' attentiveness and learning. A feedback from videotaping yourself can be very helpful. Try not to read your lecture, but improve your speaking skills with spontaneous conversation with the audience. Try next points:

- Avoid a cold start and grab the attention with a strong opening. Open with a provocative question, startling statement, unusual analogy, striking example, personal anecdote, relevant demonstration or recent news event.
- Tell your students the objectives of the course day or course hour.
- Link the new lecture or contents to the total course material. And previous lectures.
- Plan an outline or summary on the board or in the syllabus.
- Focus on your course members by a one-on-one eye contact. (Watch cultural difference about eye contact). This will increase students' attention and help you observe their facial expression.
- Convey your own enthusiasm for the material.
- Speak natural and direct; use informal language and vary your pace and tone, vary your intonation, voice volume.
- If you need a microphone take a mobile one, so you do not have to lean into the microphone and are able to move around.
- Adapt a natural speaking stance: balance yourself on both feet with your toes and heels on the floor. Keep your knees slightly relaxed. Shoulders should be down and loose, with elbows bended, and your hands on waist level.
- Standing behind a table may make you feel more relaxed.
- It might be helpful for the attention of the students to be "cruising" from right to left and in a radius to the back too.
- If you have to use a lectern, don't grip the sides with rigid elbows; instead, keep your elbows bent and lightly rest your hands on the lectern, ready for purposeful gestures.
- Watch your breathing.
- Incorporate anecdotes and stories. Maintain eye contact and use you body language to emphasize important topics. Use and watch facial expressions.
- A well-planned conclusion and summary rounds out the presentation.
- Finish forcefully with a strong voice and with a summation of the major issue of the lecture or a preview of the coming topic.
- Finish better a few minutes early and stay a few minutes afterward for individual questions.
- Make notes to your self immediately after each lecture.
- Look for objective, unanimous feedback from your students.

How to explain clearly and stimulate the learning process:

Explaining clearly and facilitate the students' learning process is an art. Some principles from motor learning for our patients are similar with principles for efficient teaching. Use of repetitions and examples, of demonstrations and problem solving tasks has to be an integrated part of our teaching. Vision is the most important receptor for learning, so use optimal audiovisual tools to clarify and teach. Make certain the classroom setting is adequate for your teaching method. Be aware of the lighting and temperature. For a good understanding, clear explanations and audience encouragement, you can follow some rules:

- Give your students the context, the structure and terminology they need.
- Make transparent what they already know.
- Don't introduce too many concepts or topics at the same time.
- Call attention for the difficult or the most important points.
- Begin with general statements followed by specific examples.
- Move from the simple to complex, from the familiar to the unfamiliar.
- Better demonstrate a complex topic or treatment rather than simply describe it.
- Use memorable examples that link ideas and vivid images.
- Use "repetition without repetition" for important understanding.
- Show your personality and interests.
- Minimize the space between you and the course members.
- Seek out weak students and compliment students after class who are excellent. Try to empathize with beginners.
- Remember, you are teaching professionals who have chosen to learn from you!
- Let discover your students own solutions on problem orientated task; this is much more efficient for learning than just listening.

9. Workshops and problem solving tasks stimulate to active participation:

Traditional lecturing suffers from a one-way communication in which the student is a passive participant and listener. Course members learn best when they take or have to take an active role: when they discuss, see, feel and practice what they are learning.

Supplements and alternatives for teaching:

Engaging the entire Group:

- Give frequent, early, positive feedback. Video feedback is a good option for treatment as teaching as well.
- Ask to brainstorm: ask a question that offer as many suggestions as possible: e.g. "Which structures could be involved and would give a good HYPOTHESIS?"
- Guide them to think in the way of the patient evaluation they will be using.
- Pause during a lecture to ask a stimulating question to all.
- Pause during a lecture for an ungraded (writing) activity or try out.
- Plan a short debate with different prepared opinions
- Play simulation games (Blind date game for example)

Workshops in small groups:

- Break the group in small groups, pairs or trios. They will learn effectively from one another by discussion or solve a problem. Use the snowball discussion technique (multiple solution from easy to difficult are possible)
- Use the twenty-five/five minutes rule: is 25% ready than give another 5 minutes to finish the job.
- Ask the group to select a chairman leading the discussion and for feedback in the large group.
- Set up "positive" competitions among groups and look also for role playing.
- Use relevant case studies and problem solving.
- One has to learn how to do this group work. The problem is always with time. The group work is not the big thing, rather the presentations and analysis following the work. You can use a half day easily! So, make certain the tasks are really good!
- Give the groups a clear task about what they should do. Give it to them in written (black board, flip chart or handout)
- Give the groups a time frame, when they should be finished with their task

- Announce the end of the group/partner work in time (like: "two more minutes to finish, so change therapist-patient if you have not yet!")

PNF-demonstrations, followed by practicing:

- Do not use all the time the same student(s)/course participant(s) for demonstration. The person who plays the patient can not make his/her notes, while you are demonstrating something on her/him. It gives also the impression that you favor these persons. Try to incorporate every course participant for demonstration.
- After demonstrating on a student make sure that this student gets a private "lesson" as this student might not have been able to see everything from your demonstration.
- At the end of a demonstration give or better ask for a short summary of your explanations. Especially when the participants are supposed to practice something, it is hard to remember what was at the beginning. So your demonstration can end like "and now I want you practice following things: 1st...2nd...3rd..4th.. Use the black/white board or flip chart as support.
- Before you demonstrate a pattern, technique etc. try to practice it once on your demo-student beforehand to make sure that what you want to demonstrate works. If you face the situation that something is not working on your student during the demonstration, it is sometimes better to change the demo student instead of trying for too long to correct the problem.
- Limit practice to a few tasks. If you demonstrate, for example, ten different body mechanic variations, the participants will forget most of them anyhow.
- Visual presentation: Stand so that your students/course participants can see what you are demonstrating. You may ask some participants to move so they can see better, but do not ask the whole group to change their place all the time. It is quicker to turn the table or to change your own position.
- Change partners: Ask the participants to pick a different partner each time they practice. It will improve their motor skills when they learn to apply PNF on different individuals. Also, it is good for the general learning process and group dynamics. Very often partners of similar levels sit together. So, if two weak students are always practicing together, they will benefit less from the course.
- Let the student feel what you mean. Make sure that every student has at least once felt a pattern or technique by you. It is much easier to perform a pattern if you had the experience on yourself what it should feel like. You will also have information about how the participant react. Are they easy to facilitate.

- The instructor also has to play the patient. Let the students work on you. Here you get good feedback regarding your teaching. Was it clear or were some points not understood. Applying resistance is a difficult task. For the students, it is the best feedback you can give by allowing them to work with you. This will also help you know where the participant needs help and assistance.
- Use of sides: use in demonstrations always the same side of your demo-student. This is important especially when some participants are doing their notes like this "the right hand of the therapist is placed proximal on the arm and the left hand is placed distally" If you change the sides the student can get confused.
- Your students will copy everything you are showing. If you demonstrate for example a leg pattern on a student with long pants and socks on, you will have a hard time to make the students to take them off for practicing when you ask for it later.
- Take care about details. For example if you are demonstrating something on body mechanics, take care that everything else is appropriate. If you neglect your grips in this situation students will not take care about correct grips anymore.
- Remember: not all course members learn in the same way. Some learn better by doing or discovering, other better by listening, thinking first and understanding the problem. Variation in teaching methods is necessary.

Conclusion:

For hundreds of years, teaching was typified by an professor reading a lecture to an audience of note-taking students. Over the last twenty years, however, this model has given way to a new understanding of what constitutes effective instruction that emphasize active learning and collaborative activities and engage students or colleagues in intellectual and practical discovery.

According to this view, the instructor's task is to interact with his course members in ways that enable them to acquire new information and practice new skills.

We hope that the summary of the above mentioned tools for teaching will be helpful for this goal.

Dominiek Beckers & Marcel Grzebellus

IPNFA-Education Committee

Literature:

Davis B.G. *"Tools for teaching"*. Jossey-Bass, San Francisco, 1993.

ISBN 1-55542-568-2 , www.josseybass.com .