



LTTA Content Summary – Hannover – June 2019

Increasing learning motivation through emotional learning

- 1 Introduction
 - 2 What are emotions and what are they for?
 - 3 How are emotions related to memory and learning?
 - 4 Conclusion: The role of emotions in learning using the example of joy and fear
 - 5 Transition
 - 6 Literature
- Methods of the LTT in Hannover

"So when you enter classrooms again as an adult in order to take a course in this environment - because you have not had such good experiences - you are overwhelmed by fear, perhaps by sickness. The old atmosphere, as it was stored emotionally (...), is present. Old experiences are present: the teacher, supported by a scholastic teaching style, and my habitual emotional state (...) are reactivated by current impressions. My heart beats faster, I get a clammy feeling, sweat breaks out, or anxiety spreads. I evaluate the situation in my self-portrayal as a typical feeling of being set back into a student situation, which I notice when entering the classroom and the appearance of the teacher. (...) This anxious discomfort creates a basic mood that connects the old with the new. Much will depend on the teaching/learning arrangements, what becomes of it." (Gieseke 2007: 52.)

1 Introduction

The project, in the context of which this scientific report will be published, deals with the subject of learning motivation. It is assumed that learning does not only involve cognitive processes, but is an interplay of social, emotional and cognitive parts. In this part of the report, the project aims to find out how emotions can be used to enhance learning motivations. In a workshop with various actors from adult education, methods were tested that should support such a goal. Especially in the target group of disadvantaged learners, the possibilities and limits for pedagogical work are to be emphasized, because here, distinctive features of learning motivation and willingness for lifelong learning are most frequently found.

At this point, the scientific basics of the topic, Emotional Learning, will be dealt with. It is important to understand what we mean by emotions and how emotions arise and work. Their influence on memory and learning should be explained. The role of joy and fear in the process of learning will be specifically investigated.



2 What are emotions and what are they for?

If one first enters the subject of emotions in a neurophysiological way, the need for a basic definition of emotions is obvious. In many languages, including German, we differentiate between the terms emotion and feeling. In the following we will deal with the concept of emotion in order to avoid misunderstandings. Briefly a few words about the distinction:

Emotion describes an affect, or also a movement of mind (see Schischkoff 1991). It is a psychophysiological, also physical phenomenon that is triggered by the conscious or unconscious perception of an event or situation. The psychophysiological reaction consists of physiological changes, specific cognitions, subjective emotional experience and a human behavioral tendency. It sometimes withdraws from linguistic comprehension.

The feeling of a feeling, in turn, describes the most diverse psychological experiences and reactions that can be described, such as fear, anger, comedy, irony as well as compassion, jealousy, fear, joy and love.

Antonio Damasio also clearly distinguishes between "emotion" and "feeling". He has defined the two key terms in the context of modern neurobiology as follows:

"Emotions are complex, largely automatic programs for actions designed by evolution. These actions are supplemented by a cognitive program that includes certain thoughts and forms of cognition, but the world of emotions consists mainly of processes that take place in our body, from facial expression and posture to changes in internal organs and environment. Feelings of emotions, on the other hand, are compound perceptions of what happens in our body and mind when we have emotions. As for the body, feelings are not the processes themselves, but images of processes; the world of feelings is a world of perceptions expressed in the brain maps". (Damasio 2013: 122)

This distinction is necessary in the context of a scientific examination of the phenomenon of the significance of emotion for learning, but at this point this brief classification and definition should be sufficient, although this complex subject area certainly would yield much more.

3 How are emotions associated with memory and learning?

In educational sciences, the study of the significance of emotions for learning has a very long tradition. Hundreds of years ago, various scientific trends were already dealing with the significance of emotional aspects for human development. All these movements had in common the insight that emotions are to be seen in the context of the holistic view of human beings and their education (cf. Hascher 2009: 81f.).

Three pedagogical principles can therefore be deduced:

1. emotions are core elements of the human being
2. emotions form (therefore) a central basis in pedagogy
3. emotions themselves are goals of education and training (cf. *ibid.*: 84)

First of all, there were studies on the effects of fear and pressure to perform and how they affect learning behaviour. Other emotions were rarely treated.



Different connections can be drawn between neurobiology and educational research and common consensus can be established.

Emotions are involved in the construction and organization of memories in long-term memory and they determine which knowledge we bring back to consciousness at a certain point in time. Moods (long-lasting emotions) and short-term emotions affect our thinking in three ways:

- Through the emotional content of the object that we perceive
- By our state of mind at the time of both saving and recalling the information
- Feelings (fear, grief, joy, anger, etc.) influence what information is stored in a particular situation.

This makes clear the importance of the condition at the time of perception for the networking of information in the brain. Also relevant is the fact that both positive and negative feelings can promote or interfere with the process of memory formation.

Claudia Wassmann writes in her book "die Macht der Emotionen" what emotions are and how they affect areas such as learning and memory. According to her, fear is an important emotion from an evolutionary point of view, which helps to achieve maximum performance in risky situations. The "tunnel vision" helps us in dangerous moments to notice important details extremely precisely and to act very fast. The consensus in research is that fear narrows perspective and can be helpful in the short term: This form is called panic fear. A certain degree of nervousness before an exam can therefore be beneficial.

The researchers agree, however, that fearful pondering hampers the performance of the working memory and is therefore rather negative for learning: networking and retrieval of learned contents are affected by permanent stress. The reason for this phenomenon is that brooding and circling thoughts take away the place in our short-term memory that learning content could occupy, explains Wassmann. In short, learning with a full head is rarely a good idea: we read a sentence ten times and still haven't really grasped the meaning - in psychology one would say that automatic information processing is interrupted over and over again. And that still costs us time.

Researchers had test persons perform exercises in their experiments and measured their brain functions. The areas for cognitive and emotional processing were equally active in the beginning. The only measure that led to a reduction in emotional activity in the brains was to repeat the same tasks. And when the participants knew the task very well, the emotional processing was reduced and the cognitive processes came to the foreground.

The efficiency and thoroughness of problem solving are in turn favoured by a mildly positive mood.

Emotions reinforce the formation of memories when we learn things that match our mood. Positive things are remembered better when we are in a good mood and vice versa. This phenomenon is called mood-congruent learning or mood-dependent remembering.

The next highly relevant aspect in this context is that emotionally charged events are remembered better than something that has no emotional value for the individual (cf. Wassmann 2002: 96ff.).



4 The role of emotions in learning using the example of joy and fear

According to McDougall (1933), emotions have the following three components: Knowledge, Affect and Striving. When someone experiences sadness over the loss of self-acceptance when learning a foreign language, it is accompanied by an awareness of one's own person. This may express itself in discouragement and dejection, and will most likely lead to a lack of confidence in learning. But this can also lead to other reactions such as aggression or envy, because you may realise that you are excluded from a certain but crucial world.

Individual patterns of action are always filled with emotional knowledge and stored accordingly. Thus they influence every learning process. This means, in reverse, that for a lively, individual learning biography it is of great importance for subjective action to have direct access to one's own emotions (cf. Gieseke 2007: 55.).

Joy and fear are opposing emotions which, according to Gieseke, mark the poles for learning activities. In psychological emotion research, fear as fear of school, fear of failure and fear of performance is the area that has been studied most broadly. In contrast, this does not apply to joy. So the question is obvious whether school is an institution that makes people anxious.

In order to investigate how joy and fear affect the educational process, these emotions should be examined more closely.

Joy, according to Gieseke, makes you feel light and satisfied. It often occurs at the goal of desires, i.e. when one has achieved something, in terms of personal or group performance. These can be learning successes, educational qualifications or the completion of a creative project. However, these aspects do not guarantee joy. Joy makes you more self-confident, vital forces increase, you smile or laugh. One feels understood, loved and used and recognises one's own abilities. Joy and interest are closely connected. Potentials for learning can result from the accompanying increase in activity. Not only mental, but also physical activity can trigger joy. If we are in a flow, i.e. if our whole personality is interested in one thing, another person or concentrates on one activity, then joy is often nearby. This means that it is not only about degrees and certificates, but also about the way to get there if we are interested.

Intrinsic learning interests are fundamentally supported by these positive emotions.

The dark side of joy lies in the glee. When the failure of the other (often envied) persons encourages, amuses or satisfies us. This is often due to a lack of self-confidence and an imbalance in one's own life. A non-reciprocal rivalry is often found in school and work contexts, which can lead to bullying. This is because, according to Gieseke, too much depends on school qualifications. As there is constant measurement and competition in working life, job references are written and employees are described as human capital, enthusiasm and spontaneity often cannot develop here. You can only feel real joy at work if your individual talents can be used, if there is an inner and outer independence and if you can pursue your tasks in self-respect, for which you are also appreciated. Joy comes when the work is interesting. That's what it is when one's own skills are tested and one is active in creative work. The permanent appropriation and expansion of one's own interests, i.e. the process of self-education, is a source of joy. As a result, it is a matter of keeping the balance between performance thinking, claims and needs control (cf. Gieseke 2007: 59ff.).



Fear, in turn, is a paralyzing, narrowing emotion, as opposed to joy, which is expanding. With a feeling of helplessness one lacks a view of available resources to solve a problem. At the same time, however, fear can have an activating effect like a warning function when it is followed by excitement.

Gieseke refers in the following to a study that deals with fear as a factor in lifelong learning. The results show that adult education is always linked to previous school experiences, both positive and negative - as soon as learning arrangements, institutional constellations or commitments are similar, these experiences are activated. Often, participants in adulthood compensate for school trauma and related emotions such as grief, anger or envy. This is because the central educational events in life are qualifications, skills and their valuation by others.

Fears can already be triggered when entering a class-like room, when observing certain table constellations in the learning room or with certain forms of teaching/learning. The room climate and situational conditions play an important role in adult learning. Fears and well-being have an important spatial dimension. Group constellations that remind one of class associations are also often fraught with fear, as are test and inquiry situations. Gieseke points even further: fear of proving situations is directly relevant for continuing education (cf. Gieseke 65ff.).

5 Transition:

- Lifelong learning is closely linked to emotions, as adults take their experiences and memories with them into the course or seminar.
- Space and teaching arrangements play an important role in adult education
- Vocational education and training must arouse interest in order to create joy and strengthen learning outcomes and thus the whole person of the learner. Creative development and the promotion of self-efficacy should be included in pedagogical planning and action.
- Fears (fear of appearances, of self-assertion, of devaluation and inferiority) should be the subject of further education and should be researched more closely in the context of lifelong learning.
- Performance anxiety is social anxiety and affects well-being and living together with others. It has arisen from the socially constructed living conditions of the competitive society. Adult education can develop approaches here, not only for specific learning goals and degrees, but for the common good and the mental health of the learners. The critical examination of the mechanisms of the fear-promoting society should play a role here.

This is exactly where the ELMO project comes in. In the methods of our workshop below we have consciously dedicated to creating joy. Particularly in the "Chair Tilting" method, the difficulty of the fear of performance control was called up by the participants. Also in the other methods the participants noticed that experiences and fears from school times can influence the events very strongly especially with disadvantaged learners. With this target group it is imperative to consider the emotional components of learning and especially of the learning setting and to react appropriately.



6 Literature

1. Damasio, A.(2013). Selbst ist der Mensch: Körper, Geist und die Entstehung des menschlichen Bewusstseins. München: Pantheon Verlag.
2. Gieseke, W.(2009). Lebenslanges Lernen und Emotionen. Wirkungen von Emotionen auf Bildungsprozesse aus beziehungstheoretischer Perspektive. Bielefeld: W. Bertelsmann Verlag GmbH & Co. KG.
3. Hascher, T. (2009). Emotionen und Lernen. In H. Ganthaler, O. Neumaier, & G. Zecha (Hrsg.), Rationalität und Emotionalität (S. 81-96). Wien: LIT.
4. Schischkoff, G.(1991). Wörterbuch der Philosophie. 22. Aufl. Stuttgart: Kröner.
5. Spitzer, N. (2014). Emotionale Welterschließung. Die aktuelle Rolle von Emotionen und die kognitiven Therapien. Zeitschrift für Rational-Emotive & Kognitive Verhaltenstherapie, 25, 7-24.
6. Wassmann, C.(2002). Die Macht der Emotionen. Wie Gefühle unser Denken und Handeln beeinflussen. Darmstadt: WBG.
7. Wilhelm Karl Arnold, Hans Jürgen Eysenck, Richard Meili: Lexikon der Psychologie. Herder, Freiburg im Breisgau/Basel 1971, Lemma Emotionalität.



Methods of the LTT in Hannover:

| Method: <u>Chair Tilting (Warming up)</u> | |
|--|---|
| Basic idea (summary) | Chair tilting is an interactive systemic method for training, coaching and team development. |
| Goals | Team development, optimizing cooperation and processes, loosening after a break, develop team collaboration and communication, Improve team results |
| Conditions | |
| Target Group & Group Size | Target group: Young adults, adults, disadvantaged learners (if there are no physical barriers) Group size: up to 30 participants |
| Material | chairs |
| Preparation | A chair circle is formed. You need the same number of chairs as participants. |
| Procedure | <p>The participants stand outside behind their chairs and hold the chairs tilted forward in balance with their right hand.</p> <p>The left hand is not allowed to be used. The chair stands on the front legs. The task is to run around the chairs in a circle without tilting them over.</p> <p>It is also not permitted for a chair to be trapped between two others and to "stand" by itself or for a chair to remain without a hand during the course of a circle. The group must organise itself and set its own pace.</p> <p>In very small groups 2 rounds can be given from the outset.</p> <p>As soon as a chair falls or the rules are broken, the whole group has to go back to the beginning.</p> |
| Modification options | <ul style="list-style-type: none"> • It is not allowed to speak. • The speed must be increased. • The direction changes |
| Evaluation | |
| Tips for trainers | You should explain the context for this method. Otherwise the effect might be different. It is important to explain that this method is used to encourage the participants to work out a solution together and to cooperate with each other. |
| Questions for evaluation/debriefing | <p>What have you experienced, how did you proceed?</p> <p>What does it take to work better? What were the resistances?</p> |



| | |
|-----------------------|---|
| | What was it like for those who dropped their chairs? What insights can they transfer to everyday work? What does that have to do with leadership? Who has taken the lead? How was that for you? What was it like for the team to let him/her take the lead? |
| Other comments | Here it is important to pay close attention to how the group reacts to possible saboteurs. If it is always the same person who interferes with the flow, attacks may occur. It is important that the moderator keeps reminding the participants to remain silent. |

| Method: <u>Thumb Greeting (Warming up)</u> | |
|--|--|
| Basic idea (summary) | A small method to achieve an immediate improvement of the learning climate and to make it visible is the so-called "thumb greeting". It can be used at the beginning of a seminar or workshop and very often it develops into a "self-runner" or ritual. After breaks, on the next seminar morning or when new "team energy" is needed. A very strong and emotionally powerful method. |
| Goals | Improves learning atmosphere, creates nearness. Emotions through touch have been proven to provide for relaxation, satisfaction, serenity. Through this the willingness to learn grows! This method is also useful for learning names. |
| Conditions | |
| Target Group & Group Size | Target group: Young adults, adults, disadvantaged learners Group size: up to 30 participants |
| Material | No material needed |
| Preparation | No preparation needed |
| Procedure | The moderator goes to the first participant and touches the tip of his thumb with the raised thumb and says "Good Morning (<i>NAME</i>)". All the others now greet each other in the same way. It is not so easy to hit the other person's thumb, which in itself provides a lot of humour and noticeably triggers relaxation in the room. |
| Modification options | You can use the little finger as an enhancement. |
| Evaluation | |
| Tips for trainers | Dissolve the small greeting or "micro-energy" exercise regarding the emotionally favorable learning climate. What constitutes a touch is remarkable and should be reflected upon. |
| Questions for evaluation/debriefing | How was it to literally "get in touch" with each other? Did you like it? Was |
| Other comments | Note that there may be cultural differences in whether touches are |



| | |
|--|---|
| | accepted, e.g. between different genders. Also, the thumb raised in different cultures may mean different things. |
|--|---|

| Method: <u>World Café</u> | |
|--|--|
| Basic idea (summary) | World-Café is a method of group work where discussion and reflection can take place |
| Goals | The aim of this method is to look at a topic from several angles and to promote communication between the participants. |
| Conditions | |
| Target Group & Group Size | Target group: Young adults, adults, disadvantaged learners (if there are no language barriers) Group size: Suitable for bigger groups (15-1.500), depending on the size of the room, the amount of tables etc. |
| Material | Flipcharts, Tables, Pens, big room |
| Preparation | Think about the questions or topics you want the group to discuss. Write one on each flipchart For 20 People → four or five tables in the room with enough space between each other |
| Procedure | Explain the method and the goal and build Group Put the Charts on table 7 Minutes for each group to discuss the question They write their results on the flipchart Then change the table (rotation) The results can be presented by one participant that stays at one table the whole time or by the seminar leader |
| Modification options | They write one own flipchart with the results and present this afterwards If so: the group write one own flipchart with the results and present this afterwards |
| Evaluation | |
| Tips for trainers | There should be enough space for communicating. Try not to comment on the discussions. The time that the individual groups get for the tables can be decided in advance in the plenum (democratic principle). |
| Questions for evaluation/debriefing | How easy was it for you to give your opinion? Was there someone who dominated the conversation? How could the many individual views be summarized into a few key points? Were there points that |



| | |
|--|--|
| | were discussed away? Were the quiet ones also motivated to express themselves? If so, how? |
|--|--|

| Method: <u>Skilled Hand Exercise</u> | |
|--|---|
| Basic idea (summary) | This exercise helps people find out more about each other. It may also help some people to get into a positive and confident head space. |
| Goals | build trust in a group by sharing personal stories with each other |
| Conditions | |
| Target Group & Group Size | Target group: Young adults, adults, disadvantaged learners (if there are no language barriers) Group size: 4 – 100 people |
| Material | Pieces of Paper, pens |
| Preparation | No preparation needed |
| Procedure | Hand out paper and pens. Ask everyone to draw around their hands and to write something they do well into each of the fingers. Split into pairs. Pairs take turns discussing things they do well and how they acquired those skills. |
| Modification options | Or if people know each other already, they could draw round their hand and add their name, and then other members of the group could add in their skills. |
| Evaluation | |
| Tips for trainers | Be aware that this exercise could be demoralising for anyone who doesn't value or recognise their own skills! Try giving very varied prompts for things people might consider skills, to give the maximum chance that everyone can think of something to write in each finger! |
| Questions for evaluation/debriefing | How easy or difficult was it to find five skills that you achieved? If it was very hard, why? How do you feel about the other persons achievements? |

| Method: <u>Compliments</u> | |
|-----------------------------|--|
| Basic idea (summary) | Accepting and expressing compliments and criticism requires a whole portion of self-confidence. Many people feel uncomfortable. The following exercise can make them stronger. |
| Goals | This method strengthens self-confidence: giving and receiving |



| | |
|--|---|
| | compliments gives a pleasant feeling and an awareness of one's own strengths and those of others. Improves group bonding. |
| Conditions | |
| Target Group & Group Size | Target group: Young adults, adults, disadvantaged learners Group size: up to 30 participants, but better for smaller groups |
| Material | Paper, scissor, pens, container for the paper |
| Preparation | Prepare small pieces of paper |
| Procedure | <p>The group members receive small slips of paper which they label with their names. The notes are mixed. Then everyone draws one of them. Those who draw their own name quickly put the note back. The group now sits in a circle. One after the other, everyone must stand up and pay a compliment to the group member whose name they have drawn.</p> <p>The addressed group members try to give the compliment with an honest to receive your consent. You can answer the compliment with statements such as</p> <p>how:</p> <ul style="list-style-type: none"> - I'm glad. - I like to hear that. - That's good for me. <p>If you can't get a word out, you can just smile friendly or nod seriously.</p> |
| Modification options | The group can also stand up completely and walk through the room. One gets a compliment and then looks for the person to whom he has to pay a compliment. So movement comes in and the compliments are not audible for everyone. This variant is good if the groups don't know each other so well yet. |
| Evaluation | |
| Tips for trainers | Give the participants the information that all compliments are good. If they can't think of anything about the personality of the other, they can think of a compliment about the look or a great gesture/expression of the other. |
| Questions for evaluation/debriefing | How difficult was it to endure compliments and react to them without contradiction? How difficult was it to directly express compliments? How did the group members feel during the exercise? How do they feel now that they were 'on'? Which answers and reactions were particularly appropriate? |

| | |
|------------------------------------|---|
| Method: <u>The outsider</u> | |
| Basic idea (summary) | This method is used to experience the emotional state of being an outsider or a minority and to observe how majorities/big groups act toward differences. This method is very special and will be |



| | |
|--|---|
| | remembered. |
| Goals | Showing group dynamics, reflection on social behavior, creating strong emotions |
| Conditions | |
| Target Group & Group Size | Target group: Young adults, adults, disadvantaged learners (if there are no physical barriers) Group size: 15-50 |
| Material | Very small pieces of paper and adhesive tape (better: blank stickers) |
| Preparation | Create sticker/paper groups to equip the participants with. Depending on the size of the group, at least 5 different note groups should be created. These are provided with symbols. These symbols also have colours. Vary these, but also work with either color or symbol overlaps. There has to be one single symbol without a group or an overlap with the others: that's the outsider. |
| Procedure | First ask the participants to close their eyes and warn them that they will be touched in the face. Then place the stickers on their foreheads. Stick them randomly, but choose the outsider wisely in advance. Ask them to open their eyes and give the instruction "group yourself in silence!" Don't answer questions. Wait until the participants grouped themselves, reply "no" and wait some more minutes. Wait to see if groups include "the outsider". End the process and thank the group. |
| Modification options | |
| Evaluation | |
| Tips for trainers | The game master must get the group to be completely calm. The evaluation is important and should be given enough time. Individual participants can speak about how they felt and what strategy they applied and how they perceived the others. |
| Questions for evaluation/debriefing | How did you go about it? How did you feel as part of a group/as an outsider? What is the best way to solve the game? |
| Other comments | This game can be used excellently in seminar scenarios with the topic political education. Especially when it comes to the topic of exclusion. |

| | |
|---|---|
| Method: <u>Expressing Emotions</u> | |
| Basic idea (summary) | Here we work with the emotion cards that our Turkish partners have created. It is useful for expressing and recognizing emotions. |



| | |
|---|--|
| | |
| <p>Goals</p> | <p>It is suitable for teaching disadvantaged learners emotional competence and improving group dynamics. In the long run, mobbing can be prevented through the use of these cards, which increases motivation to learn.</p> |
| <p>Conditions</p> | |
| <p>Target Group & Group Size</p> | <p>Target group: Young adults, adults, especially disadvantaged learners Group size: up to 30 participants</p> |
| <p>Material</p> | <p>Emotion Cards</p> |
| <p>Preparation</p> | <p>Create and print the Emotion Cards</p> |
| <p>Procedure</p> | <p>There are two groups. One player from one group draws a card from the pile. S/he tries to explain the word on the card to her/his group using mimics and gestures in 30 seconds. The group gets a point when they give the correct answer</p> |
| <p>Modification options</p> | <p>The cards can also be handwritten. The time to present the emotion can be increased or decreased.</p> |
| <p>Evaluation</p> | |
| <p>Tips for trainers</p> | <p>This game is suitable for international groups because there is hardly any need to speak. Intercultural similarities and differences in emotional expression can be shown and discussed.</p> |
| <p>Questions for evaluation/debriefing</p> | |
| <p>Other comments</p> | <p>Possible problems: they may not want to explain the emotion and there might be some emotions that have similar meanings.</p> |