social video hub
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Practical guide: How to use Social Video Learning method (Video Annotation) with v-Portfolio in the Social Video Hub

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Developed in the “SolVing 2” project, subproject of “Mein Bildungsraum”

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1. Introduction

Videos have long been a central medium in our communication and learning culture. Whether in tutorials, lecture recordings, or practical documentation – more and more content is being delivered through moving images. They are considered the preferred medium of digital communication because they convey information quickly, vividly, and emotionally.

However, as present and popular as videos are, their use in education often remains superficial. Content is frequently consumed passively, and the learning effect is limited. Social Video Learning (SVL) addresses exactly this issue.

It combines the strengths of the video medium with the principles of reflective, dialogical, and co-constructive learning. Through video annotation, static videos become dynamic learning spaces where knowledge is commented on, discussed, shared, and further developed. Learners are invited to mark relevant points in the video with their thoughts, questions, and observations – either individually or collaboratively with others. This creates a learning process that:

- **Promotes deeper understanding** because learners actively engage with what they have seen.
- **Enables social learning** by making different perspectives visible and open to negotiation.
- **Stimulates reflection** because learners question their own ways of thinking and acting.

The literature review by Evi Colombo and Cattaneo (2020) confirms that using video annotations in educational contexts has a positive effect on learning and competence development. However, the impact depends on the video annotation software and the instructional design or the level of support provided. Cognitive activation and social interaction – two key factors for successful learning – are often lacking in mere video consumption.

The focus of this practical guide is the **didactically grounded use of the Social Video Learning method** within a digital tool: the **Social Video Hub**.

Context: Research Project and Funding

The Social Video Hub was developed in the project **SolVing II – Social Video Hub: Collaborative Video Annotation for the Promotion of Video-Based Teaching,**

Learning, and Knowledge Work in Multiple Contexts, funded as part of the BMBF initiative *Mein Bildungsraum* and the European Union's *NextGenerationEU* program. The aim of the project was to develop and pilot a holistic video annotation solution for video-based teaching, learning, and knowledge work in various contexts – from higher education to professional development, and from volunteer training to corporate learning.

Scientific literature and practical trials in the project show: **video annotation works** – especially when it is meaningfully embedded in didactic settings. (See **2. Didactic Foundation**)

Goals and Target Audience

The aim of this guide is to empower teachers, trainers, educators, and educational planners to use the Social Video Hub in a didactically meaningful and context-sensitive way – enabling a new quality of reflection, feedback, collaboration, and competence development.

Ziel dieses Leitfadens ist es, Lehrende, Weiterbildner:innen, Ausbilder:innen und Bildungsplaner:innen zu befähigen, den Social Video Hub didaktisch sinnvoll und kontextsensibel einzusetzen – für eine neue Qualität von Reflexion, Feedback, Zusammenarbeit und Kompetenzentwicklung.

This guide offers:

- A well-founded overview of the didactic potential of video annotation.
- Practice-tested methods and application scenarios for different educational contexts.
- Design aids for assignments and reflection processes.
- Tips for integrating into existing educational programs.

It serves as an invitation not only to use a new tool with the Social Video Hub but also to explore **new pathways for networked, reflective, and competence-oriented learning with video**.

2. Didactic basis

2.1 What is social video learning and what are its didactic potentials?

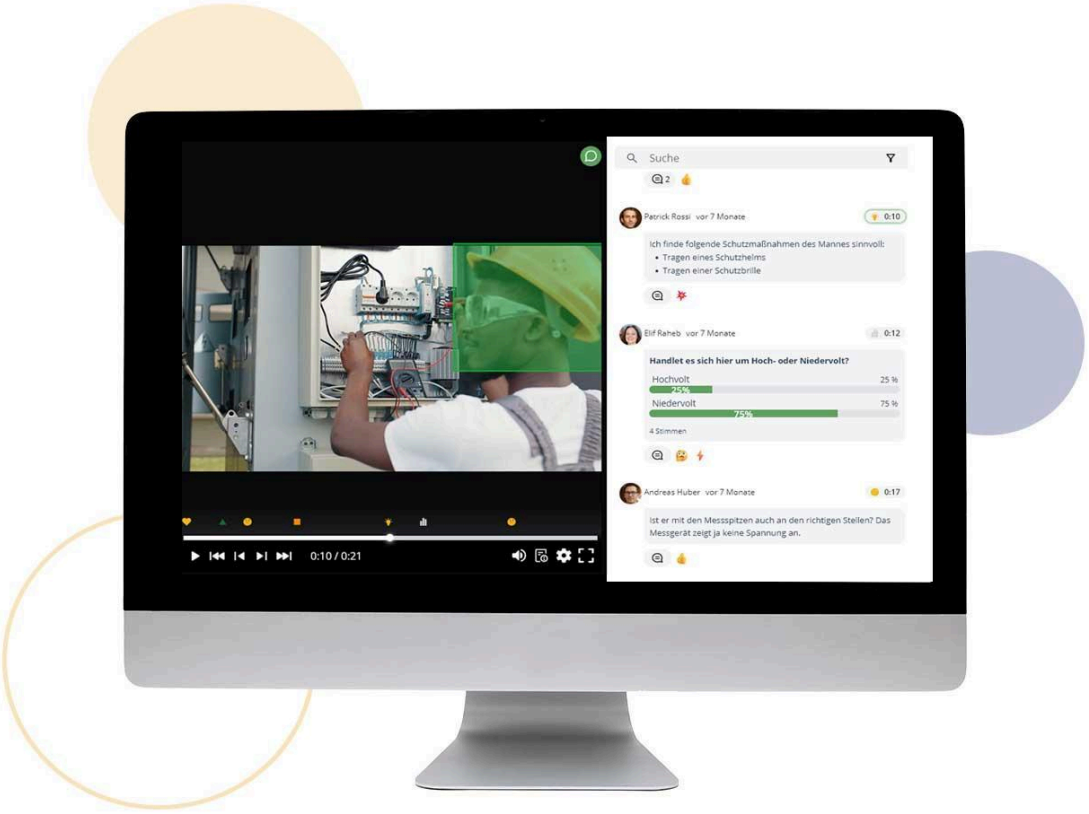

Figure 1: Example of Social Video Player with video comments and poll

Social Video Learning refers to a form of learning in which video content is not merely consumed passively, but actively, reflectively, and collaboratively explored. At its core is the ability to comment on and mark up videos through digital annotation tools, bringing them into dialogue – both individually and collaboratively.

The type of video also plays an important role. Particularly engaging are **authentic situations** from professional fields of action, ideally learner-generated content (User Generated Content) that activates learners.

Unlike traditional video formats, in Social Video Learning learners become **active co-creators** of the learning process. They:

- **Observe** specific scenes or actions (sometimes theory-guided) – *Learning to See*.

- **Formulate comments, questions, or interpretations** directly in the video – *Verbal Anchoring, Promotion of Feedback Culture*.

- **Read and respond to peer comments** – *Social Dimension: Networking, Knowledge Exchange, and Negotiable Perception, e.g., in transdisciplinary settings*.

- **Reflect on their learning** in personal or collective exchanges – *Making learning moments visible and connecting them*.

This transforms a linear, often fleeting medium into an interactive thinking space where learning becomes visible, discussable, and connectable – both in real time and asynchronously.

This form of learning is particularly suited to contexts where reflective and professional development is the focus – such as teacher education, healthcare, sports, or workplace training.

Ruth Arimond (2020) shows that annotations serve as a bridge between action and thought. They not only structure perception but also encourage the reorganization of knowledge – in line with the *knowledge transforming* and *knowledge constituting* processes described by Bereiter, Scardamalia, and Galbraith.

2.2 Learning with Video: Between Experience, Reflection and Creation

Videos can stimulate learning at different cognitive levels:

- **Experiential Mode** – Learners experience situations “as if they were there,” seeing, hearing, and observing – often without deeper processing.

- **Reflective Mode** (based on Donald Schön, 1983) – The viewed material is analyzed, compared, and evaluated. This requires supportive learning settings – exactly where video annotation comes in.

- **Creative Mode** – Learners produce their own videos or design portfolios, actively constructing their knowledge.

Social Video Learning primarily addresses the reflective and creative modes. Through annotations, perception and thinking are externalized – an effect further enhanced through discussion, feedback and portfolio work.

2.3 Lifelong Learning in the Context of Video Annotation and Portfolio Work

Lifelong learning is more than professional development – it means actively shaping and reflecting on learning processes throughout life. This involves not only building new competencies but also recontextualizing existing experiences.

The **v-Portfolio**, closely linked to the work in the Social Video Hub, offers ideal conditions for this:

- It **documents individual learning paths** through annotations, reflections, and media artifacts.
- It **links formal, non-formal, and informal learning**, especially through media representations of experience.
- It **supports telling "learning stories"** – structuring and interpreting learning experiences over longer periods of time.

In this way, the portfolio becomes a reflection tool for learners of all ages – whether in studies, continuing education, or professional life. Combined with Social Video Learning, it creates a methodological approach that not only documents professional and lifelong learning but actively fosters it.

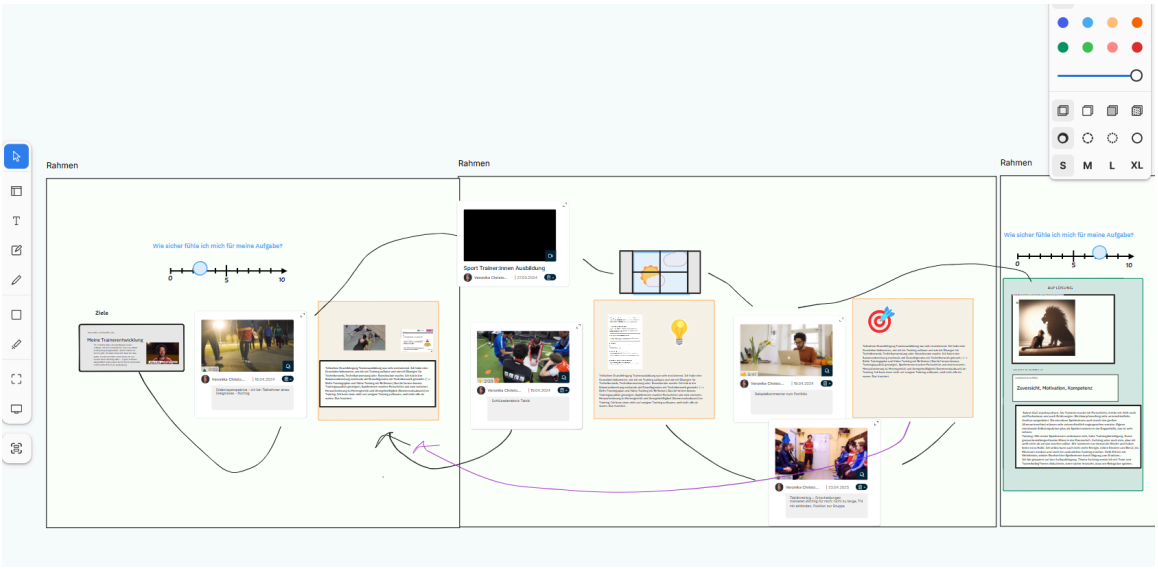

Figure 2: Example of a portfolio in the Social Video Board

3. Technical and Methodological Foundations

The following section systematically describes the key components of Social Video Learning (SVL) (see Vohle, 2019; Arimond & Vohle, 2025) and illustrates them with screenshots from the Social Video Hub:

The Video Medium: The Foundation of the Learning Process

A key didactic principle of SVL is the **use of self-produced videos**. Learners can upload video material from their work or learning environment directly and share it with selected groups.

This form of *user-generated content* strengthens **self-relevance, authenticity, and motivation** – and supports **competence-oriented and values-based learning** with strong connections to real-life contexts.

Learners' Own Videos: Learning Processes from the Real World

Ein zentrales didaktisches Prinzip von SVL ist der Einsatz selbstproduzierter Videos. Lernende können Videomaterial aus ihrem Arbeits- oder Lernalltag direkt hochladen und mit ausgewählten Gruppen teilen. Diese Form von *user generated content* stärkt die Selbstbezüglichkeit, Relevanz und Motivation – und unterstützt kompetenzorientiertes sowie wertebasiertes Lernen mit hohem Lebensweltbezug.

Precise, Time-Stamped Video Annotation: Reflection at the Object

Figure 3: Presentation of elements in the Social Video Player

The didactic core feature of SVL is **video commenting**: learners can leave comments at any point in the video – in text form, with symbols (e.g., emojis), or with graphic markers such as arrows or circles in the frame.

This enables them to point directly to specific content, ask questions, record observations or inspire interpretations.

This visible anchoring of thought fosters **deeper engagement** with the respective scene and makes individual understanding transparent.

Re-Commenting: Enabling Dialogic Learning

Existing comments can be directly responded to – through so-called **re-comments**.

This function opens a **digital dialog space** in which different perspectives can meet, be supplemented, or challenged.

The result is a **multi-layered, collaborative web of interpretations** that significantly deepens the quality of reflection.

Dashboard and Teams: Overview and Participation in the Learning Process

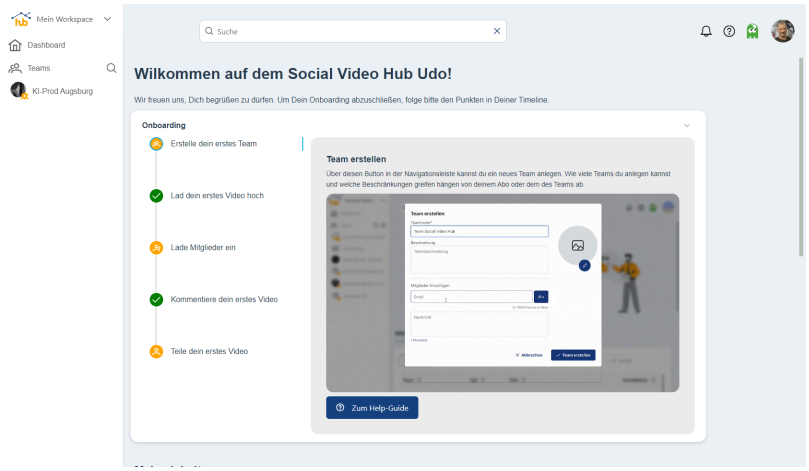

Figure 4: Welcome page on the dashboard

A central control element in the Social Video Hub is the **dashboard**, which provides a clear overview of all comments, responses and interactions.

The onboarding process helps learners to get started, as **low-threshold access** and **intuitive usability** are key success factors in Social Video Learning. Ease of use is a **fundamental prerequisite** for the method to work effectively.

In the dashboard and notification center, learners can also see **where discussions are taking place**, **where open questions remain** and **how actively the group is participating**.

Access rights can be managed via teams for entire video collections or for individual videos. Automated email notifications foster continuous participation and keep learners engaged outside of synchronous sessions.

Social Video Board

The **Social Video Board** is particularly noteworthy: video comments can be freely arranged and re-contextualized.

This **visual reorganization** supports a semantic re-networking of what has been seen – for example, as a basis for a **v-Portfolio** or group reflections.

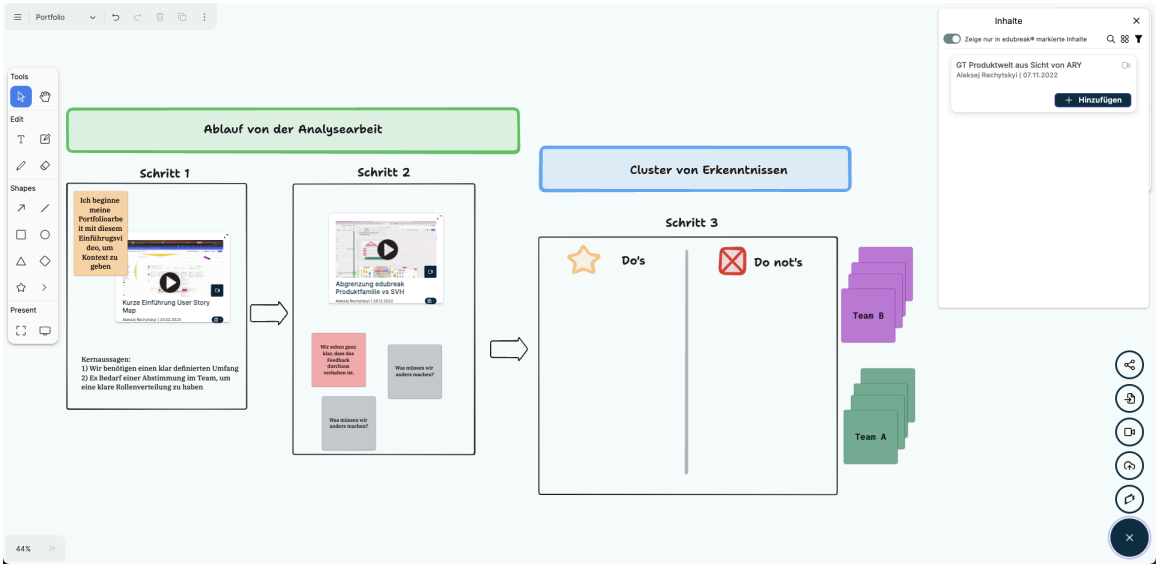

Figure 5: Example of an assignment on the Social Video Board

AI Functions: Extended Didactic Options

In the current version of the tool, AI-powered functions are also available – such as **automatic subtitles**, **chapter suggestions**, **transcriptions of audio comments** or **summaries in the board**.

Conclusion

Social Video Learning reaches its full potential when **technology and didactics intertwine** (see Vohle & Reinmann, 2012; Arimond, 2020).

The following method cards are intended to help ensure successful implementation.

4. Overview of Methods with Application Scenarios

	Method	Objective	Procedure	Example	Notes
	**Peer Feedback with Video Comments**	Promote reflection and feedback competence	Watch video → comment specifically → give feedback	Technical analysis in sports training	Provide commenting guide with examples; clearly define roles
	**Multimedia Learning Landscape in the v-Portfolio**	Structure self-reflection and make learning processes visible	Comment on own videos, collect learning artifacts → structure and enrich in Social Video Board	Self-observation in teacher training internship	Use reflection questions; encourage regular annotations
	**Re-Annotation with Version Comparison**	Make developments and learning progress visible	Annotate before-and-after videos and compare	Rhetoric training	Document comparative analysis in v-Portfolio
	**Group Annotation as a Discussion Stimulus**	Encourage perspective change and collective understanding	Annotate video together → hold synchronous group discussion	Case discussion in nursing training	Assign roles/ positions; give targeted commenting tasks
	**From Discussion to Documentation**	Structure and document results	Social Video Board → sort and enrich video comments	Summary of group feedback	Provide transfer instructions and portfolio structure templates

Peer Feedback with Video Comments

Title of the Method	**Peer Feedback with Video Comments**
Objective	Perspective change, reflection and feedback competence.
Short Description	Learners specifically comment on each other's videos and give feedback based on the observed actions or performances.
Procedure	1. Upload or select a video. 2. Provide feedback criteria. 3. Watch the video and comment with time stamps. 4. Develop feedback in a dialog format.
Example	In coach training, two participants analyze each other's movement instructions using a video recording.
Didactic Notes	Clarify feedback rules (e.g., according to Hattie); allow role changes; use closed or open settings.
Technical Tips (SVB)	Use commenting aids (visual tags, emojis); make use of the notification center for feedback.
Extension	Use re-commenting for deeper dialogue; document reflection on feedback quality in the portfolio.
Competence Reference	Reflection competence, communication skills, perspective-taking.

Method: Multimedia Learning Landscape in the v-Portfolio

Title of the Method	**Method: Multimedia Learning Landscape in the v-Portfolio**
Objective	Structure self-reflection and make learning processes visible in a multimedia format.
Short Description	Learners transfer selected videos, video comments, observations, and insights from annotations into their v-Portfolio (the Social Video Board) to create an individual, visually structured reflection landscape.
Procedure	1. Comment on your own videos. 2. Arrange relevant annotations and videos in the video board (v-Portfolio). 3. Add reflection elements into the v-Portfolio. 4. (Video) present the results.
Example	Teacher trainees analyze their own teaching videos, visually structure key scenes in the board, and document their insights in the portfolio.
Didactic Notes	Provide reflection questions; optionally provide examples or templates in the Social Video Board; encourage combining text, symbols and visual elements.
Technical Tips (SVB)	The Social Video Board includes portfolio templates for inspiration; AI in the board can summarize or cluster content.
Extension	Link with competence frameworks or learning biographies; peer review of learning landscapes.
Competence Reference	Self-reflection, media competence, metacognitive skills.

Re-Annotation with Version Comparison

Title of the Method	**Re-Annotation with Version Comparison**
Objective	Make developments and learning progress visible.
Short Description	Two (or more) videos recorded at different times (e.g., before/after a learning unit) are annotated and compared to identify and reflect on progress and changes.
Procedure	1. Annotate both videos. 2. Systematically compare comments. 3. Document findings in the v-Portfolio. 4. Present progress (video presentation).
Example	Provide observation criteria; suggest comparison structures in the v-Portfolio (e.g., before/after columns).
Didactic Notes	Provide observation criteria; suggest comparison structures in the v-Portfolio (e.g., before/after columns).
Technical Tips (SVB)	Group comments thematically; use visual tags for important observation criteria.
Extension	Add peer feedback; combine with self-assessment.
Competence Reference	Observation skills, change competence, self-efficacy.

Group Annotation as a Discussion Stimulus

Title of the Method	**Group Annotation as a Discussion Stimulus**
Objective	Encourage perspective change and collective understanding.
Short Description	Learners comment on a video from different perspectives (e.g., roles, positions, professional viewpoints) and use these annotations as the basis for a joint discussion and consensus-building.
Procedure	1. Assign roles and clarify perspectives. 2. Comment on the video. 3. Hold a discussion based on the annotations.
Example	In nursing training, learners comment on a patient scene from the perspective of the nurse, the patient, and an observer.
Didactic Notes	Assign clear roles; prepare commenting tasks; structure the discussion.
Technical Tips (SVB)	Use color codes or emojis for role assignment; use board-based discussion.
Extension	Combine with reflection protocols in the v-Portfolio; the core principle can also be applied without artificial role assignments for digital project meetings with highly diverse groups, or to add depth in asynchronous meetings with limited synchronous time.
Competence Reference	Perspective-taking, argumentation, communication, interdisciplinary understanding.

From Discussion to Documentation

Title of the Method	**From Discussion to Documentation**
Objective	Structure, secure, and individually reflect on results.
Short Description	Learners transfer significant annotations from group work (e.g., in the Social Video Board) into their personal v-Portfolio to create individual learning narratives.
Procedure	1. Joint annotation or discussion in the Social Video Board. 2. Select relevant comments and clusters. 3. Transfer and reflect in the v-Portfolio.
Example	In professional development, participants summarize jointly commented scenes from a customer interaction video and derive individual insights in the portfolio.
Didactic Notes	Clearly formulate transfer tasks; provide structural aids (clusters, reflection questions).
Technical Tips (SVB)	Use drag & drop in the video board; use video recordings for result documentation in the Hub.
Extension	Gather peer feedback on portfolios based on discussion content.
Competence Reference	Structuring skills, reflection competence, written expression.

5. Success Factors and Experiences from the Project

For Social Video Learning to unfold its full impact, more is required than just functioning technology – it needs a carefully designed didactic setting that deliberately fosters reflection, communication, and co-constructive learning.

The following key success factors are derived from theoretical foundations and empirical experiences from the SolVing II project as well as relevant literature (e.g., Arimond, Evi-Colombo et al.):

1. Authenticity

The videos used should have a realistic connection to the learners' life and work environment. It is especially effective when learners can contribute their own videos – for example, from teaching situations, training sessions, counseling conversations or work processes.
This not only creates a high level of identification but also a strong link to one's own practice.

2. Scaffolding and Structuring

Particularly for learners without prior experience in video annotation, **supportive structures** are essential. These include observation grids, reflection questions, commenting aids, role assignments or example collections. They help maintain focus, identify relevant aspects, and use commenting as a genuine learning opportunity.

3. Social Interaction and Peer Feedback

Social Video Learning thrives on exchange. Peer comments, re-comments, and board discussions enable perspective changes and shared understanding. To make these exchanges productive, dialog prompts, feedback rules, and sometimes moderation are helpful.

4. Reflective Task Formats

Assignments should be designed to encourage learners to engage with their own perceptions, the actions of others, and theoretical references. Open, ambiguous, or controversial situations are particularly suitable for generating depth of reflection.

5. Narrative Reorganization in the v-Portfolio

Learning is especially enhanced when learners **structure and rearrange** their observations, comments and insights in the v-Portfolio. This creates a personal learning

narrative that not only documents but also supports self-clarification and self-representation.

6. Didactic Integration

Video annotation should not be an isolated activity. It should be embedded in a broader didactic concept – with clear objectives, phases of preparation and follow-up and connections to further learning activities (e.g., presentations, portfolios, assessments).

7. Technological Usability

Technical barriers should not hinder learning processes. Annotation tools should be low-threshold, stable, and intuitively usable. Helpful elements include **intuitive interfaces**, **supportive hints within the tool**, and **good integration into the overall system**.

8. Feedback Orientation

The quality of learning processes is strongly linked to the quality of feedback. Whether from peers, tutors, or AI – feedback should be relevant, constructive, and substantively grounded. It helps to clearly define feedback formats and, if necessary, provide feedback guides.

9. Time Framing

Reflection requires time. Planning should therefore deliberately allow space for annotation, discussion, and further thinking – without time pressure. Especially in blended or asynchronous formats, this deceleration can be a crucial success factor.

6. Task Templates for Various Educational Contexts

The following are four example task formats for Social Video Learning, directly aligned with the didactic success factors described above. They can be flexibly adapted to different contexts (teacher education, professional development, higher education, club-based training, etc.) and combine video annotation, reflection and exchange.

6.1 Task Set: "Identifying Blind Spots"

Objective:
Professional self-reflection through external perspectives combined with situated feedback.

Setting:
Individual + peer.

Success Factors:
Authenticity, peer feedback, reflection structure, feedback orientation.

Task Description:

1. **Create the recording first, then analyze it** precisely using video comments.
    - Upload a short video (max. 3 minutes) showing a real situation from your work or learning context (e.g., a presentation, interaction, or exercise).
    - **Recording tips:** You can simply record the scene with your smartphone, preferably in landscape format. Make sure the person/scene is clearly audible. Ideally, use a clip-on microphone. Test the recording briefly at the start.
2. Annotate the video yourself in the first round (self-perception). Refer to the **previously discussed theory/observation criteria**.
3. Share it with two colleagues or participants from your group, who will add their own comments.
4. Then write a reflection in your v-Portfolio addressing the following questions:
    - Which feedback surprised you?
    - What differences were there between your perception and that of others?
    - What will you take with you for your future actions?

6.2 Task: “Perspective Dialogue”

Objective:
Collective interpretation of a complex situation.

Setting:
Small group.

Success Factors:
Social interaction, role differentiation, discussion, time framing.

Task Description:
Jointly comment on a video (e.g., a scene from a counseling session, a teaching situation, or a conflict). Each person takes on a fixed role with a specific observation focus (e.g., “team leader,” “external observer,” “person involved”) or an observation criterion (e.g., *Four-Ears Model* by Schulz von Thun). Use color markers or emojis to assign roles. Then discuss your different perspectives in the video board.

In the v-Portfolio:
Summarize your view of the situation and reflect on how the change in perspective has altered your understanding.

6.3 Task: “Making Before-and-After Visible”

Objective:
Analyze and document learning progress.

Setting:
Individual.

Success Factors:
Scaffolding, re-annotation, portfolio integration.

Task Description:
Upload two videos of yourself – one at the beginning and one at the end of a learning process (e.g., a role-play, presentation, or execution of a practical skill).
Annotate both videos focusing on the following guiding questions:

- What am I doing better?
- Where has my behavior changed?
- What uncertainties still remain?

Create a comparison in your portfolio showing before and after (e.g., as a table or annotated storyboard).

6.4 Task: “Exporting Discussion Clusters”

Objective:
Capture shared knowledge and extend it individually.

Setting:
Group → individual.

Success Factors:
Didactic integration, transfer, visual reorganization.

Task Description:
As a team, comment on a video dealing with a complex topic (e.g., team communication, ethical dilemma, customer interaction).
Cluster your annotations thematically in the video board.

In the (online) face-to-face exchange:
Directly address differences in perspectives.

Literature

Note on the use of artificial intelligence:
The AI-based language model ChatGPT (GPT-4 from OpenAI) was used to support the creation of this practical guide. The AI was used in particular for structuring, text formulation and linguistic revision. The authors were responsible for the content and for reviewing and approving it at all times.

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