

Ben Bachmair 2013

Bicycle workshop for migrants: mobile photo portfolio for verbalization

As an initial phase of their career as learners, 15 to 17 year old teenagers newly arrived in Germany from all over the world get acquainted with the unfamiliar German learning culture. They take part in a special programme at secondary school where they receive support to reach basic graduation. As part of this programme they undertake a 12 hour long course on four afternoons, a bicycle workshop, which takes place outside the school and which is organized professionally. During the workshop and under supervision of a craftsman groups of around 10 repair old bikes. After a short introduction they work on bikes in pairs or in groups of three.

The facilitator of the workshop reported on in this case study invited the students to produce two portfolios consisting of photos: a *Bike Repair Handbook* and *Our Journey to Work*. Students were invited to use their personal mobile phones or smartphones. The handbook-portfolio aimed to reflect the workflow involved at a visual level. Furthermore, participants were encouraged to verbalize the workflow on the basis of their photos. Back in school they summarize their experiences on PowerPoint slides, which they present during a public event.



Photo portfolio in the form of a *handbook*. PowerPoint provides the interface.

The facilitator recommended for the *handbook* to mirror the model of IKEA instructional leaflets. It is target orientated with a focus on the components of bikes, e.g. on wheel bosses or transmissions, and for the workflow to focus on how to repair a bicycle tube. The students

concentrated on the technical elements as part of their activities. At first they dealt successfully with wheel bosses or transmissions. Then they added keywords in German to the pictures and a very short description of the activities of their own. At a second stage, back at school, they used PowerPoint to summarize, rethink and verbalize their experiences. PowerPoint requires short written statements to explain what the photos depict. Taking photos supported analytic and synthetic learning activities, always from the perspective of personal action in cooperation with peers and the craftsman. The activities undertaken by students were also analytic (what are the elements of a gear transmission system?) and synthetic (showing the repaired transmission at work). By taking photos, thinking and practical action started with visual perception which requires no unknown vocabulary as a prerequisite. But the German language environment suggests and advises on the necessary and appropriate vocabulary. Due to self-produced photos no memorization of abstract vocabulary is required. Instead, the focus is on speaking and learning by doing on the basis of self-selected visuals. The handbook is a further step towards the acquisition of new language. The proposal to produce a *handbook* required students to write short statements. The PowerPoint version of a book with few pages fitted in with image-orientated learning of key vocabulary but enhances it to reach the level of articulation of a full statement in the new language.

The third slide includes a picture which does not seem to fit within the frame of work: a group of boys having fun riding a bike. This raises the question of how to integrate the joy of learning into a target-orientated workflow? Students were invited to take photos for their *Bike Repair Handbook* as well as for a personal diary *Our Journey to work*. The mobile portfolio consisted of the work and outcome-orientated handbook and of a diary, which was like a collection of holiday photos. The photos from the diary helped to integrate all *fun*-orientated attitudes of students. By taking photos of their attitudes the students are in the way becoming aware of these attitudes and can integrate them into their learning process. The diary offered the facilitator a perspective on the attitudes of the students which were usually excluded from formal learning although these *informalities* are part of a successful learning process. These photos enable the facilitator to recognise informal part of learning as helpful side of formal learning.