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Learning and Teaching Music with the Inverted Classroom Model in Schools and Higher Education

Introduction

The Inverted Classroom Model (ICM) is an instructional strategy and a type of blended learning, mainly used in school subjects with alternating phases of teacher input and exercise. In contrast to the traditional way of teaching, pupils prepare themselves at home by watching short video clips. To support the learning process while watching a video, different types of tasks are offered. After this preparation phase, the students come to class with the self-learned basic knowledge about the current topic. ICM increases the time available during lessons for the teacher to interact with the pupils, support them in their individual learning process and deeper understanding of the topic. The role of the classroom teacher changes from "the sage on the stage to the guide on the side".

Regarding the quality standards for digital teaching and learning materials in Austria, the Ministry of Education has stated that the technical, content, and didactic design should exploit the potential of the technologies with regard to the learning objectives to be achieved and promote the use of innovative teaching methods. The methods and learning materials used in ICM almost fully meet all requirements for these quality standards.

The Concept of ICM

The debate on the effects and applications of technology for teaching and learning has gained momentum in recent years. This can be attributed to the increasing digitalisation that has already permeated all areas of our lives. We get up to the ringing of the smartphone, buy our train ticket via an app, and learn how to play music via YouTube. The fact that this

debate has been going on for many decades seems to have been forgotten in many publications, political decisions, and expert lectures (De Bruyckere, Kirschner, & Hulshof 2016). So, can a medium influence learning success? Does medium A lead to better learning than medium B? Richard Clark (1983, 1994) and Robert Kozma (1994) had one of the best-known debates about this, concluding that it is not the medium that is decisive, but a didactic design that takes into account the target group, learning goals, methods, media, and other framework conditions (De Bruyckere, Kirschner, & Hulshof 2015; Kerres 2018).

One concept that has set this holistic view as its goal is reversed teaching. Lage, Platt, and Treglia (2000) describe the inverted classroom as an inclusive learning arrangement for their students of microeconomics. Their aim was to take into account individual differences in learning by creating learning opportunities for both self-directed and more dependent learners. Bergmann and Sams (2012) transferred the concept to school teaching. The two science teachers taught at a school with many talented athletes. These athletes often took part in competitions and therefore missed classes. To ensure that these students could also learn the content Bergman and Sams recorded videos demonstrating physical and chemical experiments. These videos then helped learners understand the content they were missing and complete the learning tasks set. Other pupils also wanted to see these videos and Bergmann and Sams made it possible to access them. The videos were not seen in class, but at home as preparation for class. In class, learners worked on projects, group work, and in-depth tasks based on the content of the videos. The role of the two educators also changed towards what King (1993) called "from sage on the stage to guide on the side". This also corresponds to what is called "direct instruction" in English literature. In the European context, this didactic concept was often misinterpreted because it was equated with teacher-centred instruction (Hattie 2008, 2014). In fact, direct instruction is a concept that describes and demands several phases for teaching. At the beginning, for example, a mediation phase is needed to activate the learners' previous knowledge or to impart new knowledge for the first time. This is followed by a phase of independent working/learning and, at the end of the unit, an exchange in the plenum or a group about what has been learned. Teachers are given a very active role, which goes beyond the idea of the coach: They become activators, they prepare stimulating learning environments, and support learners during the work and learning phase (Hattie 2013; similar concept in German: Teml & Teml 2006). The flipped classroom tries to reflect this concept by outsourcing the first phase – the more teacher led phase – thus allowing more space and time for the work and learning phase in classroom teaching (Bergmann & Sams 2014; Bishop & Verleger 2013).

If a teacher-led phase is enriched with phases of location-independent and self-regulated learning with digital media, one speaks of blended learning. Blended learning uses the best of both worlds: (digital) media are used for an accompanying online phase in order to deliver content mediation as a self-directed and multimedia learning process.

The teaching (= the "presence phase") serves the social exchange, the common working on problems, and the deepening of content, concepts, or provocations, which were introduced in the online phase. The fact that these blended learning formats have advantages has been repeatedly shown in meta-analyses (e.g., Means et al. 2009). The decisive factor here is that the attendance phase changes decisively. If video presentations are shown again in class or more teacher-centred methods are used, such approaches make little sense. The advantage of flipped classroom and other blended learning approaches lies in the joint work with others, which can then lead to deep learning (D'Addato & Miller 2016), and in the methodological diversity of learner-centred methods, for example, problem-based learning, project work, etc. (Velegol & Zappe 2015).

As we know from existing research findings, these rather constructivist methods cannot be considered independently of knowledge. For example, research has shown that solving problems depends on previously acquired knowledge. If problem-based learning approaches are used to acquire new knowledge, the problems offered in these instances are usually very simple and can be solved without great cognitive effort: therefore, deeper learning does not take place (Hattie & Yates 2014; Kirschner, Sweller, & Clark 2006). This can also be explained using the Cognitive Load Theory (Paas & Sweller 2014): Beginners need instructional measures that strongly support them in acquiring new knowledge and skills. They will then be able to engage in deeper subject-based discussions and tasks. Advanced learners are less dependent on such supporting measures, as they already have sufficient prior knowledge for further tasks. For beginners, however, the use of flipped classroom is a good option; for instance, when in combination with demonstrated examples (Hattie & Yates 2014). Instructional videos can be such worked examples, for instance, like Bergman and Sams, who made scientific phenomena visible via video recordings. It is important to note here that students should be allowed to ask questions at the beginning of the "presence phase" and teachers should respond to these questions. Flipped classroom does not mean letting students' appropriate content entirely on their own.

Similar to Bergman and Sams, most teachers use audiovisual learning materials – in the form of videos (de los Arcos 2014) – during the preparation phase of their flipped classrooms, and these can be stopped, paused, or viewed again by learners at any time. This self-regulation is already a step towards supporting learners in the preparation phase (Mayer & Moreno 2003). Further criteria are based on the principles of Mayer's multimedia learning (2014; summarised by Buchner 2018). Videos have an effect on learning if they do so without distracting elements, for example, people or redundant music, if they convey the audio-content in combination with suitable images and offer supplementary activities. The aim must be to put learners in an active role while watching videos. For example, while watching a video for music lessons, individual notes can already be replayed, or sections of a song can be repeated. The exact execution of the song then becomes the subject of the

lesson and is practised together with the other learners and a teacher (Bernhofer & Wieland 2019; Gruber & Buchner 2019).

As with any other method, there is no such thing as the best method, just as there is no such thing as the best medium for successful learning. If you want to prepare your learners well for a teaching setting that offers a variety of learning opportunities and puts them in an active role, then the use of flipped classroom is one method among many others. The question of whether it can be used for better learning should not be central here. According to Kerres (2018), the use of media for teaching and learning is more about realising learning in other ways:

> The essential potential of digital media remains the option for a different kind of learning: digital media supports learning scenarios that meet the demands for more self-directed, application-oriented, flexible and cooperative learning. (Kerres 2018, p. 118; translation by the authors)

The following sections describe and illustrate what such approaches can look like in music teaching in schools and higher education.

ICM in Music Education

There are already some concepts how musical learning can take place in connection with short video clips or soundtracks. For example, it is quite common to include a CD or DVD to an instrumental method book to foster individual learning at home.

Also, when practising an instrument in informal learning environments (Green 2008), it is common for students to use video clips or play-alongs to learn new pieces. The second of Lucy Green's principles of informal learning says: "Students learn by listening and copying records."[1] Learning by watching videos is very popular especially for the generation of "digital natives". Online video platforms offer numberless video tutorials for every situation in life. In particular, tutorials for playing musical instruments are very widespread, but you can also find tutorials that are about music theory or music history.

ICM takes one step further and focuses on two learning phases: the "distance phase" at home and the "presence phase" together in the classroom. The success of ICM strongly depends on a proper planning and connection between both learning phases. The main focus of ICM is on supporting the individual learning process of every student.

ICM is already quite commonly used in science subjects like mathematics or other natural sciences in school but hardly any documentation about ICM in music classes can be found. Catherine Grant (2013) describes the possibilities of implementing a flipped

[1] http://www.musicalfuturesinternational.org/informal-learning.html [20.02.2020].

classroom approach in tertiary music courses and points out how more musical activities and discussions can take place during the presence phase. When researching for music teachers adapting ICM in music education at school, some examples can be found in areas like music theory and music history – where short video clips were produced to illustrate learning content. However, besides these theoretical parts, music lessons at school only contain essential parts of musical practice (e. g., singing, body percussion, playing musical instruments, or movement and dancing) and it is not enough, as a music teacher, to simply provide the preproduced video clips for the pupils.

The following examples present different approaches towards the possibilities and challenges associated with implementing ICM in music education, with the focus on the pupil's learning process.

Two Examples for ICM Implementation

Storytelling with Music: A Way of Musical Interpretation of Children's Stories Supported by ICM Videos

Storytelling plays an important role in primary education and teachers sometimes also use the opportunity to do this in connection with music. Most of the time, however, this does not go beyond a simple sound painting design of individual words or the singing of songs. How this can be done more deeply, by composing short motifs and melodies using the ICM method, will be shown here. These are examples from special ICM-supported courses for primary teacher education students, conceived as a cooperation project between music and media teaching at the University College of Teacher Education, Lower Austria. The cultural-historical background to this is determined by the idea that storytelling done in connection with music has a very long tradition, as narratives of fabulous events and with deep insight into human life. To do this in processes with technology-enhanced learning may be a challenge but it opens a new chapter in learning that combines old traditions with the possibilities offered by modern ICM technology. The long-term goal is to realise such processes when teaching and learning in primary schools, so that the music can take on diverse and in-depth roles when telling a story.

The starting point for the production of the ICM videos – which are necessary for such learning processes – was the children's book *The Most Important Thing* by Antonella Abbatiello (2015). Published in Florence in 1998 under the original title *La Cosa Più Importante*, it has been translated into a number of other languages over the years: German, English, French, Greek, Russian, Spanish, and Turkish. These texts, spoken by native speakers, can also be found on a CD enclosed with the book. *The Most Important Thing* is a modern fable, an amusing discussion of the problems within our multicultural society and personal aesthetic concepts of self: Despite its simple form, it is consequently not just a story for

children. This is actually true for all good children's books, especially when they set forth problems – like here – that are evident in our presence and call for reflection and critical opinion, and question traditional and possibly outdated conditions.

For this story, ICM videos under the title "How to Compose a Melody" were developed together with primary-teacher-education students and produced as an aid and guide for all the other students to compose simple leitmotifs and musical phrases: This gives the individual protagonists of the story, the animals, an unmistakable musical identity.[2]

With the help of several indirect instructions, the composition should take shape and be given musical form, step by step.

- Step 1: Put some notes together to make a motif. Play the motif twice.
- Step 2: Combine the note sequence with a simple rhythm.
- Step 3: Play some notes louder and others softer.
- Step 4: Play the motif twice and invent an interesting conclusion.
- Step 5: Play the whole melody with the Stairplay cards.

Fig. 1: Step 1

Fig. 2: Step 5

For some, this approach may seem too traditional and too conservative. This may apply to the work of music specialists in secondary education. For teachers in the Austrian elementary schools, who are generalists, the challenge to compose together with their pupils for us seems innovative and radical enough, at least for the first time. As already mentioned at the beginning, many years of experience in teaching students, as well as with teachers in teacher training courses, have shown that almost all orient in their work with storytelling towards two models when using elements of music. Either suitable songs are sung, or simple sound paintings are created for the key words in the story. In contrast to this, the

[2] https://youtube.com/playlist?list=PLg9e8q2E5G128UiCxZNRlKaBOhp6upXmr [20.02.2020].

third option opens up a fairly new approach for many teachers, by using self-composed motifs, themes, and melodies, which goes far beyond an exclusively sound-painting design and gives much more attention to the essence and quality of music. Applying this aspect intensively and sustainably led to a corresponding conceptualisation and formulation of tasks within the framework of such ICM-supported music courses.

- Choose one of the animals from the children's book *The Most Important Thing* and think about why you made this choice.
- Alone or in a group, compose your own motif or theme for your animal with the help of the five ICM videos ("How to Compose a Melody").
- Practise playing this little melody composition with instruments of your choice (the voice can also be used).
- Look on the Stairplay cards for the name of the notes of your composition and their positions in the scale. Also use the "Stairplay Note Hand" method to write down the notes on the staves.[3]
- After this preparation phase, bring your results to the next course lecture. Present your results during the in-class phase and play your composition to the entire group of students. Discuss the result and make any changes or improvements, if necessary.
- After all the compositions are presented, read or tell the entire story and play your melodies at the appropriate passages of the text. You can also expand and enrich your presentation with sound painting elements, with a song that fits the story, incorporating movement and dance elements.
- Use these collaborative results for your next classroom teaching. Show your children how to compose a simple melody for storytelling, and, if you have enough time, also use the ICM videos.

This concept was gradually developed in the following semesters, especially in the study course "Cultural Education". On the basis of the first ICM videos, which were used for the preparation phase, the realisation of the new videos was expanded to three parts.

In part 1, the resulting compositions are presented, which were developed from the specifications of the first ICM videos in connection with the work with the Stairplay cards.

[3] https://www.hausdermusik.com/en/musikvermittlung/stairplay/stairplay-das-lernspiel [20.02.2020].

Fig. 3: Screenshot from ICM video part 1

In part 2, the students involved in the composition process explain what ideas they had and how this led to their result.

Fig. 4: Screenshot from ICM video part 2

In part 3, those arrangements are presented that expand the simple compositions in terms of their instrumentation as well as their performance.

Fig. 5: Screenshot from ICM video part 3

In addition to this, the book *The Most Important Thing* was replaced by the app *Der Karneval der Tiere* (The carnival of the animals), based on the composition by the French composer Camille Saint-Saëns. It was developed by Stephan Brülhart (pictures and animations), Markus Cslovjecsek (sound and soundtracks), and Achim Lück (text), and was interpreted musically by the Basel Festival Orchestra under the direction of Thomas Herzog. The programming was done by Markus Zehnder. The app can be used on an iPhone or iPad as an interactive picture book with music, different languages, and pictures, as well as as simple tactile-acoustic soundtracks (Brülhart, Cslovjecsek, & Lück 2011).

With its very open learning gateways, it becomes another ICM medium for the initial preparation phase and, from the beginning, students are encouraged to experiment interactively. This leads to the necessary encounter with the content, both on a visual and acoustic level, and identification with the protagonists, the animals of the story. Last but not least, these processes should stimulate a desire to invent new innovative sounds and short melodies in connection with storytelling.

For the academic year 2019/20, the conceptual approach will be expanded again, and for the first time, an attempt will be made in the context of a comprehensive classroom project. Under the guidance of their classroom teachers, children will develop and produce videos on their own, as ICM-based learning aids for learning in primary schools, made by children for children.

ICM and Musical Practice

Austria's music education is guided by a competence model which consists of the two main curriculum-based, key actionfields *musical practice* and *musical reception* (Knaus et al. 2013). Music educators are facing different challenges, especially in the field of musical practice: notably, students' practical skills or heterogeneity in music classes (Hasselhorn & Lehmann 2015). Consequently, students need more support from their teacher in this area.

This is where the idea of the ICM examples starts: Videos support learners with their musical activities at home and, therefore, musical practice at school can be facilitated by their individual preparation.

Several ICM projects were implemented in regular secondary schools, as well as in the frame of a music didactics course at university: Undergraduate students developed and tested ICM models in music classes of the Mozarteum University's partner schools.

Consisting of several short videoclips, these projects deal with polyphonic singing or percussion playing. Multiphase teaching and learning sequences are a combination of distance and presence phases. Short learning videos provide basic skills linked to the different musical material (e.g., playing different rhythm patterns with cups; everyday objects used as percussion instruments) in the individual distance phase. The collective music making in the music class (presence phase) is focusing on polyphonic playing and choreographing the piece.

Learning a Choir Piece with ICM

To integrate ICM into a music class in school, a typical task of learning a choral piece was chosen. Singing a piece for choir with several voices is a basic activity and is also mentioned in the Austrian competence model (Knaus et al. 2013). For this experiment, a class of sixteen-year-old students in a school without a musical specialism was selected. The main idea of ICM is that students prepare themselves at home for the lesson in school and so the classroom time can be used in a more effective and interactive way. For learning and practising a choir piece, it would be very helpful if the students already have an idea of their parts when the music teacher starts working with them in school. In this ICM experiment, the students from a non-music focus class were presented with short video clips recorded by the music teacher for the different voices and the music scores for practising at home. Since all of the students owned a smartphone, the clips were sent to them digitally via *WhatsApp* and they were able to listen to them wherever they wanted. The lesson sequence consisted of four phases, where distance phases and presence phases alternated.

Phase 1 (preparation at home): The task of this first phase was to study the first and second voice of the choir piece *Only You* (Mayerhofer 2000, pp. 52–54) at home. The teacher provided the music sheets as well as two recordings with the two voices one week before the music class took place. He recorded himself singing and pointing to the notes on the music sheet to help the students to follow the voice in the music score. This should

support the student's understanding of the connection between the music notes and the sung tones. As a second practice exercise, the students also got a video clip with only piano accompaniment and, with this "karaoke" version, the students could practise their parts with a harmonic support. Working with these self-produced video clips made it possible for all students of the music class to be able to practise the song at home, regardless of their sight-reading ability.

Phase 2 (singing together in school): The lesson started with a short singing warm-up, which finished by singing the two voices of the choir piece together. This was the first opportunity for the music teacher to react to any of the students' mistakes or difficulties and to address necessary corrections. Since the students already had a basic knowledge of the choir piece, the teacher was able to move more quickly to the point of musical practice, rather than only teaching them to sing the right notes. There gave more time to sing the piece with both voices together and to work on the right intonation in difficult passages. This underlines the role change for the music teacher because, in this setting, the teacher has more time to guide the students towards the musical core of the choir piece, rather than just teaching them the single parts.

Phase 3 (practising at home): Based on the results of the first two phases, the students got their next tasks for the distance phase. The video clip with the bass voice was sent to the male students and the female students got a short clip with the third voice of this choir piece. Additionally, they had the opportunity to practise all voices with the "karaoke" version.

Phase 4 (polyphonic singing): The final presence phase of this ICM experiment focused on the polyphonic singing of the choir piece. At the beginning of the lesson, all four voices were rehearsed, followed by the first attempt to sing the whole choir piece together. The rest of the class time was used to improve the polyphonic singing and to practise the difficult passages.

Evaluation of the ICM Experiment "Choir Piece"

After the fourth phase, the students got a short questionnaire to reflect on this alternative way of learning a choir piece. The items of the questionnaire focused on how the students practised with the video clips at home and about their personal perception of ICM. The questionnaire was answered by fifteen female and five male students. The most interesting results of the questionnaire were the following points: Three quarters of the students said that they practised with the video clips several times per week; one said every day and three said that they only practised once per week. One person admitted that he/she never practised with the clips at home. 75 % of the students ticked the box indicating that they repeated some of the videos to practise their voice. Half of them said that they stopped the clips when practising and wound back. This underlines one of the positive sides of practising with video clips – that everyone can learn in his/her own pace, can watch again or stop the video clip at a certain point.

Most of the students stated that they practised at home and that they did this in between learning phases for other subjects. Some of the students emphasised that practising their voice was more a free time activity than learning for school: They distinguished between learning for school and practising with video clips as different things. Learning with video clips for school was new to them, so this had a positive effect on their learning motivation.

The second part of the questionnaire focused on the attitudes towards ICM and learning a choir piece with video clips. The greater part of the students experienced the video clips as helping and motivating and they had fun practising with them. In the open field at the end of the questionnaire, there were also some critical comments of the experiment. One person mentioned that there is no feedback when you practise alone at home and you do not know if you are singing the right notes. This statement underlines the importance of the presence phase, where mistakes and difficulties can be corrected. The experiment also showed that the students can only work on a basic level of skills during the distance phase; complex tasks and intensive practising still need direct support from the music teacher in class.

One student wrote in this open box: "It is still some kind of homework." This includes two important aspects. ICM requires an intensive work phase at home, which could be challenging for some students. The second thing is that the students in this class had their first contact with ICM and learning with video clips and new things sometimes lead to a higher motivation. We do not know from this experiment if motivation decreases when it becomes a routine for the students.

Rhythm Patterns with "Voice and Cup Percussion"

In this second project, students are using rhythm instruments as well as their own voice, which is one of the core skills in the Austrian competence model. Since young learners often do not have professional instruments at home, this lesson sequence is based on "everyday's instruments" like cups. The vocal percussion is the basis for the instrumental percussion.

This lesson is planned for ninth grade. Four short video clips are used in two distance phases. Short rhythmical patterns are presented to the learners, who are asked to try them on their own at home and repeat them. Since the patterns are easy there is no further material – like sheet music – offered: This means that students have to learn the patterns by listening to them and watching the videos. The digital learning material was provided by an online storage platform (Dropbox) which was linked by a URL-shortener-service (e. g., bit.ly). This approach worked with an independent usage of the learning material with no further login process.

Students should learn to play these rhythm patterns by imitating the template while watching and listening to the videos. Since every learner is practising at home, the

main benefit for the music class could be saving time for individual training, as well as having more time to focus on musical accuracy at school when playing together.

The step-by-step-sequence of the lesson can follow four phases:

Phase 1 (practising voice percussion in distance phase): Specific syllables are replaced in the rhythm pattern. In the video, students learn to imitate them without any other instruments. For example, "ta-ki" for shaker, "ksch-za" for hi-hat. To provide differentiated learning material, the visualisation of the syllables is on screen, which should also support the learners auditive memory. Stable metre and tempo are other parameters which learners should engage with from the very beginning.

Phase 2 (voice percussion in music class): Rhythmical voice percussion patterns are replayed at school with the whole class. Corrections can be made by the teacher, and making music together is the core target in this second phase. Students learn to listen to each other; they compare their patterns and performance with their classmates and can adapt them. Variations in playing those pattern (playing in canon, different dynamics, etc.) keep the learning process diverse and exciting.

Phase 3 (practising cup percussion at home): In this second distance phase, students learn to play the patterns with cups. The patterns are transferred from voice percussion, which they already know, to instrumental patterns. Since they are familiar with the rhythmical structure of the patterns, they are prepared for transferring them to instruments which they are not used to. Playing techniques can be learned by imitating them from the videos.

Phase 4 (cup percussion at music class): In the last presence phase, students learn to play the rhythm patterns together with their instruments (cups). In this phase, students are able to use their instruments as well as play the four different patterns. In class they are able to listen to each other more easily and react to different tasks, like playing in canon or playing with different dynamics. Also, it is easier to combine the patterns with choreographical elements or to let students guide and conduct themselves.

Evaluation of the ICM Experiment "Voice and Cup Percussion"

All students in the class worked with the learning videos. 52 % were watching them once and 47 % were watching them several times, which shows a rather intense approach to the learning material. Irritating technical problems have occurred for 33 % of the learners, whereas for 38 % those technical issues have not been a problem. The rest of the students did not have any technical issues. Students responded that they used the videos in different locations: at home, at school, in the train. Also, there is a variety as to when they used the videos (on weekends, in the mornings, in the evenings). Surprisingly, 67 % of the students practised their patterns without video: This could be significant for their motivation, to practise the learning material as well as trying to play their part as well as they can.

The Music Education We Would Like?

The digital transformation is changing our world and society – and our students are changing, too. With their mobile devices they are interacting with the digitally networked world and they even create or design it. School has to react to theses changes by integrating the mobile and web platforms used by young people.

From our perspective, ICM turns out to be an approach that displays the adaptability of music education and music learning in the present and for the future:

- Digital learning: The Inverted Classroom approach is one idea for how didactically well-considered digital media can transform education and take into account the everyday life of our students by integrating video learning into school routine.
- Self-determined learning: The evaluation of the ICM projects concludes that this affords more time in class to deepen collective music making. The ICM model gives students individual control over their learning process: choosing different levels of the videos, controlling the individual place, and time of learning and self-determining their learning speed by interrupting and repeating the videos (Bernhofer & Wieland 2019).

This shows that ICM integrates new learning technologies and reacts to the needs of young learners in the transforming learning culture. Autonomy of learning can enable them to take responsibility for their own learning path, towards a "music education they would like".

References

Abbatiello, A. (2015). *Das Allerwichtigste* [The most important thing]. Munich: Edition bi:libri.

Bergmann, J. & Sams, A. (2012). *Flip Your Classroom: Reach Every Student in Every Class Every Day*. Washington, DC: International Society for Technology in Education.

Bergmann, J. & Sams, A. (2014). *Flipped Learning: Gateway to Student Engagement*. Washington, DC: International Society for Technology in Education.

Bernhofer, A. & Wieland, E. (2019). Musikunterricht geflippt – Konzepte zur Musikpraxis [Music lessons flipped – Concepts for music practice]. In J. Buchner & S. Schmid (eds.), *Flipped Classroom Austria … und der Unterricht steht kopf!* Vienna: ikon, pp. 65–82.

Bishop, J. L. & Verleger, M. A. (2013). The Flipped Classroom: A Survey of the Research. In *120th ASEE National Conference Proceedings, Atlanta, GA*.

Brülhart, S., Cslovjecsek, M. & Lück, A. (2011). *Der Karneval der Tiere* [The carnival of the animals]. https://apps.apple.com/ch/app/id466412101 [20.02.2020].

Buchner, J. (2018). How to Create Educational Videos: From Watching Passively to Learning Actively. In *R&E-Source* 12, pp. 1–10.

Clark, R. E. (1983). Reconsidering Research on Learning from Media. In *Review of Educational Research* 53 (4), pp. 445–459.

Clark, R. E. (1994). Media Will Never Influence Learning. In *Educational Technology Research and Development* 42 (2), pp. 21–29.

D'Addato, T. & Miller, L. R. (2016). An Inquiry into Flipped Learning in Fourth Grade Math Instruction. In *Canadian Journal of Action Research* 17 (2), pp. 33–55.

De Bruyckere, P., Kirschner, P. A., & Hulshof, C. D. (2015). *Urban Myths about Learning and Education*. London: Academic Press.

De Bruyckere, P., Kirschner, P. A., & Hulshof, C. D. (2016). Technology in Education: What Teachers Should Know. In *American Educator*. http://files.eric.ed.gov/fulltext/EJ1094203.pdf [20.02.2020].

de los Arcos, B. (2014). Flipping with OER: K12 Teachers' Views of the Impact of Open Practices on Students. In *OCWC Global 2014: Open Education for a Multicultural World, 23–25 April*. Ljubljana: The Open University. http://oro.open.ac.uk/40093/1/Paper_73-Flipping.pdf [20.02.2020].

Grant, C. (2013). First Inversion: A Rationale for Implementing the "Flipped Approach" in Tertiary Music Courses. In *Australian Journal of Music Education* (1), pp. 3–12. https://files.eric.ed.gov/fulltext/EJ1061810.pdf [20.02.2020].

Green, L. (2008). *Music, Informal Learning and the School: A New Classroom Pedagogy*. Aldershot: Ashgate.

Gruber, H. & Buchner, J. (2019). Online Singen und Musizieren lernen mit dem Lied "Weihnachtsträume" und mehr [Learn to sing and make music online with the song "Christmas Dreams", and more]. In *FNMA Magazin*. https://www.fnma.at/content/download/1681/6711 [20.02.2020].

Hasselhorn, J. & Lehmann, A. C. (2015). Leistungsheterogenität im Musikunterricht: Eine empirische Untersuchung zu Leistungsunterschieden im Bereich der Musikpraxis in Jahrgangsstufe 9 [Heterogeneity of achievements in the music classroom: An empirical investigation regarding differences in practical musical competences in 9th grade]. In A. Niessen & J. Knigge (eds.), *Theoretische Rahmung und Theoriebildung in der musikpädagogischen Forschung*. Münster: Waxmann, pp. 163–176.

Hattie, J. (2008). *Visible Learning: A Synthesis Over 800 Meta-Analyses Relating to Achievement*. New York: Routledge.

Hattie, J. (2013). *Lernen sichtbar machen* [Visible learning]. Baltmannsweiler: Schneider.

Hattie, J. (2014). *Lernen sichtbar machen für Lehrpersonen: Überarbeitete deutschsprachige Ausgabe von "Visible Learning for Teachers"* [Making learning visible to teachers: Revised German edition of *Visible Learning for Teachers*]. Baltmannsweiler: Schneider.

Hattie, J. & Yates, G. C. R. (2014). *Visible Learning and the Science of How We Learn*. New York: Routledge.

Kerres, M. (2018). *Mediendidaktik: Konzeption und Entwicklung mediengestützter Lernangebote*. [Media didactics: Conception and development of media-based learning opportunities], 5th ed. Berlin: De Gruyter.

King, A. (1993). From Sage on the Stage to Guide on the Side. In *College Teaching* 41 (1), pp. 30–35.

Kirschner, P. A., Sweller, J., & Clark, R. E. (2006). Why Minimal Guidance During Instruction Does Not Work: An Analysis of the Failure of Constructivist, Discovery, Problem-Based, Experiential, and Inquiry-Based Teaching. In *Educational Psychologist* 41 (2), pp. 75–86.

Knaus, H., Peschl, W., Rehorska, W., & Winter, C. (2013). Kompetenzen in Musik: Ein aufbauendes musikpädagogisches Konzept von der Volksschule bis zur kompetenzorientierten Reife- und Diplomprüfung [Competencies in music: A constructive music pedagogical concept from elementary school to the competence-oriented final exam and diploma examination]. In *Musik-Erziehung spezial* 66 (3), pp. 1–31.

Kozma, R. B. (1994). Will Media Influence Learning? Reframing the Debate. In *Educational Technology Research and Development* 42 (2), pp. 7–19.

Lage, M. J., Platt, G. J., & Treglia, M. (2000). Inverting the Classroom: A Gateway to Creating an Inclusive Learning Environment. In *The Journal of Economic Education* 31 (1), pp. 30–43.

Mayer, R. E. (ed.) (2014). *The Cambridge Handbook of Multimedia Learning*, 2nd ed. Cambridge: Cambridge University Press.

Mayer, R. E. & Moreno, R. (2003). Nine Ways to Reduce Cognitive Load in Multimedia Learning. In *Educational Psychologist* 1 (38), pp. 43–52.

Mayerhofer, L. (ed.) (2000). *4 Voices: Das Chorbuch für gemischte Stimmen* [4 voices: The choir book for mixed voices]. Helbling: Innsbruck.

Means, B., Toyama, Y., Murphy, R., Bakia, M., & Jones, K. (2009). *Evaluation of Evidence-Based Practices in Online Learning: A Meta-Analysis and Review of Online Learning Studies*. https://repository.alt.ac.uk/629/1/US_DepEdu_Final_report_2009.pdf [20.02.2020].

Paas, F. & Sweller, J. (2014). Implications of Cognitive Load Theory for Multimedia Learning. In R. E. Mayer (ed.), *The Cambridge Handbook of Multimedia Learning*, 2nd ed. Cambridge: Cambridge University Press, pp. 27–42.

Teml, H. & Teml, H. (2006). *Erfolgreiche Unterrichtsgestaltung: Wege zu einer persönlichen Didaktik* [Successful lesson design: Paths to personal didactics]. Innsbruck: Studien-Verlag.

Velegol, S. B. & Zappe, S. E. (2015). The Evolution of a Flipped Classroom: Evidence-Based Recommendations. In *Advances in Engineering Education* 4, pp. 1–37.

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For Helmut Schmidinger, being a composer is less a "job" than a system of values that – in the true sense of the original *composition* – places conjunction above disjunction. This is audible in the ways he fashions relationships to a diverse musical tradition, and in the richly varied union of text and music in literary quotations he has chosen as titles for his works. Composing for and with young people is a matter dear to his heart, a passion he shares in courses on compositional pedagogy at the University of Music and Performing Arts Graz. He offers these as part of his position as guest professor, while at the same time giving composition masterclasses for youths both individually and in groups. Schmidinger takes their musical experience as point of departure and aims to foster their individual creative talents. In his dissertation, he submitted a theoretical foundation for recognising compositional pedagogy as a discipline of musical pedagogy.

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