TEACHING CINEMATOGRAPHY
in film and audiovisual schools

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Introduction

Cinema began in 1895. To study its artistic principles and techniques, schools were founded. The first was in Moscow, Russia in 1919, VGIK (1), which is still there. It was the era of silent movies. So, cinematography was already quite important. It was film, 35mm, black and white.

Today, these schools continue to expand across five continents.

In light of my experience in leading a cinematography department from 2005 to 2008 at Institut International de l'Image et du Son (3iS), I achieved a true understanding about the different ways to teach cinematography. In that purpose, during the past two and a half years, I visited several European schools (see lists in Annexes 1, 2 and 3), spread over six countries: Germany, Belgium, Finland, Great Britain, Switzerland, and France.

Method

I selected state colleges, departments within universities, and private and public schools also offering higher education. They differ in their educational orientations, in their economic and concrete structures, and their student numbers. This diversity allowed me to obtain a wide range of information to carry out this study of different methods of teaching cinematography. I have chosen thirteen schools: four state schools, four departments in different universities, and five private or public schools.

I interviewed cinematography department headmasters, directing and editing teachers, as well as study directors and general managers. I met with students, attended lectures, preparation shooting sessions, shootings, and took part in faculty and management meetings. I was invited to screenings and to be a jury member of graduation film screenings. To acquire more information, I exchanged e-mails with my colleagues, and consulted the informational brochures and websites of these schools.

I will now discuss the general organization of cinematography teaching programs.

General principles and teaching facilities

All these schools develop a curriculum of at least three years. This is the minimum amount of time to start practicing the different aspects of film and audiovisual jobs, which a large majority of students want to attain quickly. These three years correspond with the first three bachelor years of college, under the European directive of Bologna (1999). For some of these schools, the program can be four or five years. We shall see why.

This first three-year program is divided between multidisciplinary and specialization courses. This is a common denominator between each of these schools. Most of the time, multidisciplinary education takes place in early studies. Students are required to study all the disciplines of cinema and television, regardless of the specialization they will choose or have

chosen. Specialization generally begins during the second year and the third year is then totally dedicated to that specific emphasis. This is meant to help students prepare to enter the film business through one of the different disciplines, around which this profession is organized. We'll see that the HFF Munich and LFS have adopted other progressive-study programs.

The most common specializations are production and direction. More technical disciplines include editing, sound, and cinematography of course. Depending on the school, other specializations can be offered such as screenwriting, assistant direction, script supervision, production management, narrative-feature film direction, documentary production, TV production, and for a select few set design.

Teaching cinematography

Like many other aspects of cinema and audiovisual media, cinematography has progressed a great deal. Many technical innovations have occurred and the teaching curriculum has been adapted. The birth of television was very important and even more so with the introduction of color TV. The "classic" video, now called standard definition (SD), is fully integrated into all educational programs. Increasingly, there are now also, under development, high-definition video (HD) and digital cinema. However, film is still present. Both 35mm and 16mm film are used, generally in color nowadays.

First year: initiation.

Throughout the thirteen selected schools, the teaching of cinematography already plays a very important part right from the start of the program. Learning the proper way to handle the equipment, assemble and disassemble a camera, set the camera on a tripod, look through the viewfinder, find the right focal-length, choose the correct aperture, start the camera, and say "speeding," are the first real and concrete simulations of professional film production.

For that purpose, the teaching of film techniques is still considered important. In most of the schools, students shoot their first exercises on 16mm, particularly at IAD and INSAS in Belgium, HFF in Munich, Filmakademie Ludwigsburg, and DFFB in Germany, WFS, LFS, and Screen Academy Scotland, in Great Britain, ELO TAIK in Finland, and ESRA in France. The headmasters and study directors outline the benefits of rigorous training, seriousness, and correct practices, all of which allow students to integrate all the technical parameters and foster creativity. This is confirmed by Peter Slansky, HFF Munich (2008), Peter Hort, WFS (2008), Roland Mönch, Filmakademie Ludwigsburg (2009), Sophie Maintigneux, DFFB (2009), Harriet Cox, LFS (2009), Paul Holmes, Screen Academy Scotland (2009), Timo Heinänen, ELO TAIK (2010), Serge Hannecart, INSAS (2010), Alessandro Usai, IAD (2010), and Denis Morel, ESRA (2010).

In contrast, other schools have chosen a different process. Students begin with SD video instead of film. This approach aims to a more gradual discovery of the major principles of cinematography layouts before exposing students to the difficulties of shooting techniques and methods. ARFIS and also FEMIS (1) in France favor this choice. ZHdK in Switzerland, extends it throughout the apprenticeship program of the first year, while 3iS in France applied it to the main part of the multidisciplinary curriculum. It is interesting to note that only WFS, methodically teaches both formats simultaneously throughout the first two years.

Second year: acquisition.

During the second year, students must not only confirm their acquired technical skills but also integrate them, with the utmost rigor, into methods of work that they will use in professionally more structured shooting teams. This year is a very busy year. Students who began their

apprenticeship with film will have to learn SD video techniques, while those who started with SD video will have to learn the practice of film. At this point, LFS, DFFB, INSAS, ARFIS, and HFF Munich add the introduction of 35mm. Second year programs also include, more and more frequently, teaching modules for specific techniques of HD video, as is the case for INSAS, ESRA, ARFIS and IAD. We can also note that in FEMIS, the 35mm teachings begin during second year.

All headmasters and teachers consider the second year to be the most difficult. Roland Mönch (2009), confirmed this by commenting that the "second year [is] very important," and Peter Hort (2008), remarked that the "evolution of [the students'] creativity is an important time that happens in the second year." For Jerome Gay (ARFIS), this year is intended to "empower students," (2008). Frederic Gulin (3iS) attaches importance to sophomore year as well and claims it is "a pivotal year" (2011).

For all of these schools, at this point in the program a special focus is made on the artistic side of cinematography. Beginning to master the techniques of shooting and to better understand all the parameters of movie making, students are able to become much more concentrated on the aesthetic aspects of their projects. However, the programs differ. In ELO TAIK, a creative freedom is required from students as soon as their initiation in SD video begins. At Filmakademie Ludwigsburg, students can make some choices during the course of their studies, particularly a freestyle module boosting their creativity. At the ZHdK students have the choice to use film and SD video for their productions. Examining these two different media forces them to consider the aesthetic criteria. Some other schools, in order to increase the artistic sense, set up specific exercises with strict constraints, such as recreating the image of a masterpiece or a sequence from an existing film. These are key points of the curriculum at IAD, INSAS, and ESRA. In DFFB, Bodo Knapheide (2009) asserts the principle of lifelong education, "much freedom is given to creation." At Screen Academy Scotland, this is also a constant concern of education, Paul Holmes always reminds his students to ask the questions, 'from which angle do I shoot ?' and 'what do I place in front of the lens ?'. In WFS, throughout the curriculum, students' attention is primarily drawn to the meaning of what they are shooting. At 3iS, to increase the students' aesthetic sense, a particular approach has been used since 2005 in order to create a specific production, but in the third year focusing within the cinematography specialization.

At the HFF Munich, the three year progression is totally different. The courses of the seven departments are carried out simultaneously, spread over eight semesters (four years). Two of these departments are compulsory for all the students, regardless of their chosen discipline. The first one is "the science of media and the history of film," which covers the most of the pluridisciplinary matters. The second is "technology" in which students deepen their understanding of the technical disciplines, of course including cinematography. This organization alternates on a regular basis between the technical and aesthetic modules throughout the program. Peter Slansky (2008), considers it essential for a student who wishes to move towards screenwriting or directing, to have learned how to load a magazine, check light power... As well as recording a sound.

At the LFS, the curriculum is divided in "terms", each lasting twelve weeks. At the end of each term a technical and artistic step is achieved. More than elsewhere, this rather gradual progression is organized around film teaching. During the first term, 16mm black and white film is used, while the second and third terms use 16mm color film. For the fourth, 35mm black and white, and the 35mm color for the fifth. SD video can also be chosen during the third term, primarily dedicated to the production of documentaries. Multidisciplinary and specialized education are not separated by year. The students are trained in each different disciplines, from term to term. Alan Bernstein (2009), and Harriet Cox (2010), are in favor of this rigorous teaching program so that students who mainly aim to direct when they enter the school, can harmonize better aesthetic and technical choices.

We saw that the specialization courses usually start in the second year. Sometimes recently, like in ARFIS as of 2008, when the third year has been created, or in 3iS in 2008, as a pre-specialization, when the first film production is introduced. It should be noted that among all the schools studied, ESRA is the only one which keeps the two first years strictly on multidisciplinary teachings, but with a slight, interesting difference. The first year is more geared towards framing while the second one focuses on lighting. These different organizations, considering busy schedules, show how difficult it is to cover multidisciplinary education and specialization within a period of three years. One answer to this problem might be to extend to a four- or five-year program, which we will discuss later.

After this general description of teaching methods during the first two years, and before speaking of the third one, I will clarify some examples, particularly including the first exercises using 16mm film. At Filmakademie Ludwigsburg and HFF Munich, these exercises are in black and white and in reversal. At LFS, the exercises are silent and black and white. This is the same situation at IAD – if they are in color they are shot with an old camera, the Eclair 16. You can also find the use of old cameras at INSAS (Paillard-Bolex's) and in WFS (Paillard-Bolex and Arri 16 ST). At DFFB, they choose to keep the 1.37 ratio on the standard 16mm as a starting perception of frame and space. These rigorous techniques, whether considered old or seen as obsolete, such as shooting in black and white, shooting with reversal film, handling old cameras, creating silent movies, or applying the 1.37 ratio, are nevertheless widely used as teaching tools. They can confuse students at first, but are a very effective way for them to understand and integrate the close relationship between technical rigor and aesthetic creation.

Continuing with the teaching of aesthetics in cinematography, it seems important to note that some schools are still teaching specific basic courses, such as drawing. At ZHdK, this is linked to the teaching of script editing and designing a storyboard. In ARFIS, these courses aim to develop spatial awareness, which is so important for shooting. They also aim to teach the basic sketching skills. For these reasons, they are related to a practice of creating a video portrait of another person.

Teaching 24x36 still photography is another important subject in several programs for different purposes. In WFS, at the very beginning of the first school year, it is used to begin work with photochemical pictures. Whereas in IAD, it is used to study framing, because "the slide requires great precision in framing," according to Alessandro Usai (2010), but also severs to help with script editing. At ESRA, it has an even more important status: "Cinematography can't be learned without making still pictures." -Denis Morel (2010). In this school, the first project is always a photographic slide show, even if for practical reasons they are no longer in 24x36 and are now shot with digital SLR cameras. In ELO TAIK, the 24x36 is also used for practical exercises for color temperature, and in 3iS, during the prep class at the very beginning of the studies, a first approach is based on a photographic portrait shot with three different points of views and on a story-telling including five to ten photos. Students are free to choose film or digital.
Photography is also taught during the second or third year. At ESRA during the second year, they work on the reconstitution of an oil-work masterpiece with digital photography. At Filmakademie Ludwigsburg, during the third and fourth year, film development is studied with 24x36 still pictures. However, Roland Mönch believes that "with digital color-grading it will no longer be necessary." (2009). At INSAS, during the second year they learn to develop color prints in the school lab.

The perception of space is also an aesthetic point which is important throughout the different programs. In LFS two 35mm productions, one in black and white and one in color, are required to be shot in the school cinema studios. For both exercises, the visualization must integrate the design of these sets within the set design department, which Diana Charnley, the manager, prefers to call "a key job" (2009), rather than a department. Students draw plans and make

precise models. This aims to give them a better sense of space, which will be useful to them when they placing the camera on real sets to be built. Sophie Maintigneux leads her students in the same way: "real space, view finder space... when you frame, you forget all else around." (2009).

Third and final of this first cycle year: specialization.

The third year focuses on student productions where students participate according to their chosen specialization. Concerning cinematography, they hold the positions of director of photography, cameraman, assistant cameraman, and gaffer, that many students choose in order to complete their learning in light conception. They usually fully invest themselves in this position. It is not before the third year of specialization that students really do understand the role of an assistant cameraman, both for preparation and during the shooting itself.

Additional courses are still offered. Having learned all the basics, students need to dive deeper into specific elements within their specialty, as: knowing and trying different types of cameras and light sources filters, figuring out the best methods to set up their key lights, learning to establish relationships with suppliers (including labs). These subjects are studied in seminars, workshops, and master classes now that students are much more receptive, because they have started to reach a more steady educational and professional maturity.

As far as cinematography is concerned, the teaching of film is always present and it is during this third year that the teaching of 35mm film is prevalent. At the same time students get familiar with high-definition video and digital cinema. It should be noted that all these schools introduce the HD technology at the end of their course of study and only at the level of specialization, "so that all the reflective work is finished," says Serge Hannecart (2010). But this now poses the problem of different types of cameras, and HD standards. Harriet Cox did not make any particular choice "regarding the problem of workflow in post production," (2009). These concerns are widely shared by the heads in charge of the cinematography curriculum. This is confirmed by Peter Slansky (2010), about certain mono sensor cameras which students want to use on productions.

The full HD tri CCD, two-thirds of an inch and is almost universal in HDCAM, but appears increasingly in XDCAM. For standard mono sensor, choices may differ from one school to another. We find more often cameras like RedOne, Sony F23, F35, the ARRI D21, ARRI ALEXA, Phantom, and the Varicam. Digital SLR cameras such as the Canon 5D or 7D also appear in the curriculum, but the list of places using them are not yet fully affirmed. Actually on certain projects, it is students instead who request to use them.

Here again, workshops, seminars and master classes are the best way for learning the technology and specific handling of these new cameras, notably at Filmakademie Ludwigsburg, HFF Munich, ZHdK, IAD, WFS, 3iS, LFS, and ARFIS. It is the same in other schools, but one interesting point should be noted: at INSAS, exercises are simultaneously shot in film and full HD. Students can then compare and reflect on the difference between photochemical color grading on one and digital color grading on the other. At ELO TAIK, a creative work is also done in HD video.

On a different note, it is interesting to see that at ESRA all the productions at the end of this year are required to be shot in full HD video while in most other schools the choice between film and digital is decided between the teachers and students. When faced with these two choices, I noticed that students are split. The aspect of footage ratio is an important issue that students consider when choosing between film or HD video, but the aesthetic quality of the image is also considered to hold a so great importance by those future professionals.

This three-year program for cinematography ends today with the acquisition of shooting methods in 35mm film and now more and more in HD video and digital cinema.

A three-year program and beyond ...

As we saw earlier in the article, several schools offer a curriculum that goes beyond three years, during which students acquire the essential knowledge to access their first jobs. "The main reason is lack of time," Peter Hort (2008), bitterly notes.

Indeed, after three intense years, before launching into the profession, students wishing to pursue these studies feel the need to step back and have a global view on what they have learned. They need more autonomy in their learning. They need to think deeply about the different aesthetic and technical choices possible, especially when on the way to apply them in a situation on set. The time spent exchanging different ideas and views with directors and technicians from other disciplines within a specific project is indispensible. But they also need to be heard, guided, and advised by their teachers. With this idea, some schools develop a four- or five-year curriculum.

The fourth and fifth years correspond with Masters courses, under the European directive of Bologna. This is what has been done at INSAS, IAD, ZHdK, and ELO TAIK. In contrast, Filmakademie Ludwigsburg, HFF Munich, DFFB, Screen Academy Scotland, and ESRA also developed a fourth and/or fifth year, but outside of a Master. It is also the same for FEMIS.

The organization of the fourth and fifth year is very different according to the school, which will require a more detailed study and will be the point of a future publication. "Three years is too short, five years is too long," stated Kirsi Rinne (2010).

3iS is the only school which has created a preparatory class (not mandatory), within the institute. It is intended to reinforce the general cultural and artistic achievements, before the three years of studies themselves. Since 2008, a technical approach to cinematography (and sound and editing as well), has strengthened the program. In contrast to the general trend, this program adds this fourth year to the beginning of the three main ones, rather than at the end. This option is very fruitful and effective for the students who have chosen this educational path.

Discussion

After this general overview of the organization of the first three years of teaching cinematography in these different schools, a certain point is emerging: the importance which is always associated with the teaching of film is that which our colleagues always closely relate to the rigorous methods of the business.

I noticed that students show a very different attitude toward shooting a movie in film after having already shot in video. Video is fully integrated in their daily lives and belongs to their familiar surroundings: television, computers, mobile phones, etc. "[The students] have been overwhelmed with video," states Timo Heinänen (2010). Paradoxically, while film is an older medium, it is a whole new world for them. For example, having to interpret how the picture turned out on the screen (with or without a video control) creates a kind of a strong awareness. "[The students] do not have the same approach to film as they do to video," comments Denis Morel (2010). Let us consider another example. Before their studies, in their first encounters with handheld camcorders, the students used a built-in zoom lens. When they handle a film camera for the first time, the ability to change the lens, especially a single lens, is a discovery for most of them. This discovery greatly helps to improve their questioning about the so great importance of the screen rendering of how the different focal lengths look on a screen. "To know the focal lengths, you've to go to the box," says Alessandro Usai (2008). "In video the notion of focals is more abstract," asserts Denis Morel (2010). It is true that today in HD video,

it is also possible to have fixed lenses. Nevertheless, as we have seen, none of these schools choose to teach HD video at the start of the program, when students are still just beginning.

The teachers want to keep film around for as long as possible. Moreover, for some of them, as Pierre Mennel (ZHdK), who would like to "start with film from the first year for a better introduction to light conception," (2008). Paul Holmes (2010) believes that understanding the method of working with film is a better way to train directors.

However, this same concern for the rigor of work and deepness of reflection, is also apparent for the initiation to SD video. In the first year of the program in ZHdK, Pierre Mennel (2010), only uses the manual functions of the Z1 camera. At 3iS, zoom is first only used at fixed focal lengths. Students are progressively allowed to use the zoom feature on their different projects. At INSAS, shooting silent movies remains an effective way to learn to choose principles set ups in relation to shooting in video. Moreover, Serge Hannecart (2010), voluntarily uses an uncalibrated video monitor and keeps it black and white to avoid "at all costs wisiwyg ('what you see is what you get')." In ARFIS also, the use of the video monitor is not regular. Indeed, the attraction for beginners to see the live images is very strong, but I noticed that even on their first attempt, when students shoot in SD video without a monitor, they easily get used to working without it and are thus much more receptive to the questions they must constantly be asking themselves about the focus, exposure, and color balance.

Today "digital" development is increasing. Facing this evolution, cinematography is deeply involved in the front line. But we have to distinguish between high-definition television and digital cinema. In television its original medium's quality is improving. But for digital cinema the medium itself is changing. One is always played on the small screen, while the other is always projected on the big screen, even if movies are more and more played on TV screens.

Television, the SD broadcast video, has till now been standardized with the two-thirds inch tri CCD. It still remains in the industry by improving the definition of its sensors (625 lines in 720 pixels became 1080 lines and 1920 pixels) which is full HD video. All the schools are facing this standard which does not fundamentally change the principle teachings of framing, photographic rendering, and shooting methods, even if it offers more opportunities of menu settings. However, an important change must be understood about videotaping, which was previously the standard. More and more now, the recording is done on a memory card or hard-drive, which creates technical consequences in post production and in the general workflow.

However digital cinema gives up film for video technology and its recording modes. It first used digital technology, developed for full HD TV standard, two-thirds inch CCD, 1080x1920. For the movie screen, mono sensor standards appeared, aiming to create a better image quality, but also for keeping all the benefits that shooting with film offered, what all these schools include in their educational curriculum.

Technical rigor and concentrated study on picture rendering are the main directions of these studies and is THE common point among all these schools. The next one I would note is the very strong sense of ethical aspects for cinema and audiovisual jobs, with whom the colleagues I have met are very concerned and want to transfer to their students.

Conclusion

For over a hundred years these schools have acquired rich educational experiences in regards to a specific progression of learning quite necessary for students to effectively integrate all the data which will enable them to start their careers. They have adapted their curriculum according to evolution in technology and art. For cinematography, the major changes were the addition of color in film and the arrival of television (SD video). These steps were evolutions but

not revolutions. What does the growing availability of HD media and the expansion of digital cinema will mean for the future careers of current students who will graduate soon in our schools ? I noticed the educational curriculum lean on the fundamentals to enable students to cope, as this is the best guarantee for that actual adaptation, as for those in the future. A screen remains a rectangle inside which a two-dimensional picture is played according to the perspective rules established in the Renaissance, to which movie and TV images, as drawings, paintings and still photographs also obey. This is what gives the audience who watches these pictures the keymarks to feel and understand the images meanings. HDTV and digital cinema remain played in 2D on a rectangular screen, whatever the actual resurgence of 3D is.

To complete this study, I'll discuss in a future article about the distribution and organization of general courses, practical work and shootings included in the curriculum of these schools. These shootings are very important for students as they are their first movies.

Annexe 1 : alphabetical list of visited schools :

ARFIS
Private school, Lyon (France)

DFFB
Deutsche Film und Fernsehakademie Berlin
School of the federal State of Berlin (Germany)

ELO TAIK
School of Motion Picture and Television Production Design
University of Art and Design, Helsinki (Finland)

ESRA
Ecole Supérieure de Réalisation Audiovisuelle,
Private school, Paris (France)

Filmakademie Ludwigsburg
(Filmakademie Baden Württemberg Ludwigsburg)
School of the State of Baden Württemberg, Ludwigsburg (Germany)

HFF Munich
Hochschule für Fernsehen und Film
School of the State of Bavaria, Munich (Germany)

IAD
Institut des Arts de la Diffusion,
School of free network, supported by the French Community of Belgium, Louvain la Neuve (Belgium)

INSAS
Institut National Superieur des Arts du Spectacle, et des techniques de diffusion
State School, Brussels (Belgium)

LFS
London Film School
Private School, London (Great Britain)

Screen Academy Scotland
School in partnership with Napier University and the College of Art, Edinburgh (Great Britain)

WFS
Westminster Film School. School of media art and design, department film and photography
University of Westminster, Harrow (Great Britain)

ZHdK
Züricher Hochschule der Künste
School of Art and Design, Zurich (Switzerland)

3iS
Institut International de l'Image et du Son
Private school, Trappes (France)

Annexe 2 : alphabetical list of persons summoned and meeting dates.

Bernstein Alan: head of Studies, at **LFS**
meeting and school tour, in November 2009

Charnley Diana: senior lecturer in production design, at **LFS**
meeting and school tour, in November 2009

Cox Harriet: head of camera, at **LFS**
meeting and school tour, in November 2009

Gay Jérôme: general manager, at **ARFIS** meeting and tour of the school, in July 2008 and
second meeting, in July 2009.

Gulin Frédéric: head of Studies and Development, at **3iS**
regular professional contacts

Hannecart Serge: Lecturer and coordinator of the cinematography course, at **INSAS**
meeting in October 2010, in Brussels

Heinänen Timo: cinematography department responsible, at **ELO TAIK**
meeting and tour of the school, in May 2010

Holmes Paul: lecturer in film directing, at **Screen Academy Scotland**
meeting and tour of the school, December 2009

Hort Peter: race director, **WFS**
meeting and tour of the school, in July 2008

Knapheide Bodo: head of studies, at **DFFB**
meeting and tour of the school, in February 2009

Maintigneux Sophie co-head of cinematography department, at **DFFB**
meeting and tour of the school, in February 2009

Mennel Pierre: head of cinematography department, at **ZHdK**
meeting and tour of the school, in June 2008

Mönch Roland, head of cinematography department, at **Filmakademie Ludwigsburg**
meeting and tour of the school, in August 2009

Morel Denis: head of studies, at **ESRA**
meeting at school, in October 2010

Rinne Kirsi: head of studies at doctoral level, at **ELO TAIK**
meeting and tour of the school, in May 2010

Slansky Peter: head of technology department, at **HFF Munich**
meeting and tour of the school, in April 2008

Usai Alessandro: head of cinematography department, at **IAD**
meeting and tour of the school, in February 2008 and second meeting, in March 2009.

Annexe 3 : alphabetical list of people met during the study visits but not directly quoted.

Azoulay Max: general manager, at **ESRA**
meeting at school, in June 2009

Bader Lucie: head of studies, at **ZHdK**
meeting and tour of the school, in June 2008 and second meeting, in April 2009 in Paris

Block Axel: head of cinematography department, **HFF Munich**
meeting and tour of the school, in April 2008

Degimbe Nathalie: director of external relations, at **IAD**
meeting and tour of the school, in February 2008 and second meeting, in March 2009.

Flamé Serge: general Manager, at **IAD**
meetings during the year-end projections, in June 2008, June 2009, June 2010

Gibson Ben: general manager, at **LFS**
meeting and school tour, in November 2009

Gillett Suzy: head of external relations, at **LFS**
telephone conversations and exchanges of e-mails

Gross Laurent: general manager, at **INSAS**
meeting at school, in January 2009

Wouters Michel: general director deputy, at **IAD**
meeting and tour of the school, in February 2008 and second meeting, in March 2009.

(1) **Schools mentioned in the article but not included in the study.**

FEMIS
Fédération Européenne des Métiers de l'Image et du Son
State School, Paris (France)

VGIK:
Federal State Institute of Cinematography, Serguey. Appolinarievich. Guerasimov
State School, Moscow (Russia)

(english transalation, Frédéric Jourdin, Annie Hugon et Hannah Baker)

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