**Integrative teaching**
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*This is an article about the integration of instrumental teaching, aural skills and keyboard skills and music theory at the pre-tertiary level. Team teaching and discipline crossover offer a possible solution to students’ inability to apply skills taught by specialists in separate fields. A personal development plan motivates students to direct their own learning process. A comparison of linguistic and music literacy enables us to outline the development of music literacy in four phases and understand the function of aural skills.*

In the course of his studies the music student will become acquainted with various disciplines such as solfeggio, harmony, counterpoint, etc. Already at the preparatory level, in the Young Talent Class, students are taught sight-singing and the aural and notational recognition of intervals and chords as well as basic music theory. These disciplines are viewed as a prerequisite to intelligent music practice.

Nevertheless, there seems to be a discrepancy between the level of mastery in instrumental practice and the level of mastery in aural and theoretical practice. Students with little or no theoretical understanding of music are frequently able to perform at a high technical and musical level, while students with a thorough theoretical background may exhibit a disturbing lack of musicality. Similarly, the ability to recognize intervals and chords aurally is no prediction of technical mastery of the instrument, nor of musicality.

The question arises therefore whether the aural skills and theory as they are taught are functional to good instrumental practice; for even though they may be quite relevant, the student may nevertheless be unable to apply them. The division of labour between the teaching of instrumental practice on the one hand and the teaching of aural skills and music theory on the other hand may perpetuate the dysfunction of the skills being taught.

The advantages of the division of labour as we know it are manifest: the instrumental specialist is able to coach the student to the high technical level required by present day orchestra and concert practice and the teaching profession, while the high cost of individual tuition makes it economically attractive to offer aural skills and theory in a class situation.

In this paper I will discuss the option of integrative teaching, an application of team-teaching and discipline cross-over to the problems mentioned. First, however, I would like to review some of the demands instrumental practice makes on the student and discuss the role of secondary subjects in meeting those demands.
1. Reading music

Just as the technical mastery of the instrument, the ability to read music is an acquired skill. It is unfortunately not a skill that is taught with the same methodical approach that is used to learn a language. Musicians more or less ‘pick up’ the art of reading in the course of their studies. The inability to read music well is frequently mistaken for technical insufficiency. Students who do not do well reading music frequently compensate by memorizing or playing by ear. Instrumental teachers are sometimes even unaware of the fact that the student is compensating, but no remedial training is available in the curriculum for students who require it.

Even students with ‘normal’ reading ability fall prey to specific music-reading problems of which teachers should be aware. Our notational system, for example, represents a legato phrase as a set of discrete notes instead of, for example, as a long bar of varying width bending up and down. In music reading, as in language, the advantages of a parsimonious notational system outweigh the disadvantages. Nevertheless, we should be aware of the fact that less advanced readers will tend not to vary volume and vibrato during the note, simply because of the way they react to the manner of notation. This mistake becomes exceedingly apparent in longer note values. The teacher should be aware that students making this mistake are not necessarily less ‘musical’ although their playing may give rise to that misconception.

A similar reading problem stems from the fact that, in our notational system, notes belonging to the same rhythmic motive are not necessarily connected and vice versa. We generally use beams to connect quavers and semiquavers within the beat, with perhaps the exception of the upbeat, while the rhythmic motif, more often than not, not only crosses the beat, but also the bar line. Again, the accepted notation enhances readability; but poor readers will frequently fail to identify rhythmic and melodic motives correctly because the ‘beaming’ offers a conflicting picture. Again, this problem will manifest itself in unmusical playing but does not necessarily imply a lack of ‘musical talent’ on the part of the student, but rather a poor level of reading skill.

The ability to read well is particularly important for classical musicians who, unlike their jazz counterparts, are practically wholly dependent on the exact text of the composer’s manuscript for the practice of their art. The fact that a shortcoming in reading ability, just as a shortcoming in technical mastery, frequently expresses itself in the form of unmusical playing should emphasize the urgency of including reading instruction in the curriculum.

Ear training

The term ‘ear training’ covers a broad variety of skills associated with aural development of the student, for example:

- the ability to reproduce (sing or play) a rhythmic and/or melodic pattern by ear;
• sight-‘singing’, i.e. the ability to reproduce (sing or tap) a rhythmic and/or melodic pattern represented in our notational system;
• dictation, i.e. the ability to represent an aurally presented melody in our notational system;
• the ability to aurally identify the intervals created by two voices sung/played together;
• the ability to recognize aurally the root, third, fifth, etc. of a chord;
• the ability to identify the harmony of a music example or cadence by ear;
• harmonization, i.e. the ability to recognize the harmonic implications of a given melody by ear;
• the ability to recognize chromatic as well as non-harmonic tones (with their resolutions) aurally, etc.

It should be clear that each of these skills belongs to the necessary equipment of the professional musician. Yet it should also be pointed out that every one of these skills is related to instrumental performance in a different manner, and at a different level. Just as, in language development, the knowledge of spelling, vocabulary, grammar, etc. can be seen as a necessary part of the curriculum, we must admit that even totally illiterate individuals may reach an unbelievably complex level of language mastery without ever having made acquaintance with the alphabet, let alone the grammatical particulars of their own mother tongue. That the same can be true in music should hardly surprise us.

**Reading-readiness**

The term ‘ear training’ implies that the student who has not mastered the subject is unable to hear (musically). This would be like suggesting that an illiterate child is unable to understand his own language. What we call ear training is, in fact, for the greater part: reading-preparation instruction or, as it is called in language instruction: ‘reading readiness’. Just as in the reading-readiness programme, the elementary-school child must be taught that a sentence is made up of individual words, although he or she is already in possession of a satisfactory vocabulary and can manipulate it with ease, similarly a young musician must be taught that musical sounds can be grouped in intervals and chords, etc. which can be recognized aurally and visually, before he can actually learn to read a score adequately. The fact that many young students without ‘ears’ perform so satisfactorily is therefore not as surprising as it may seem; they may play well but nevertheless exhibit symptoms of illiteracy. But this fact should not blind us to the reality that further progression may very well be dependent on the ‘aural’ skills being taught. The literate musician will have indeed mastered sight-singing and dictation.

**Listening training**

To be sure, a certain amount of aural training can be termed: ‘listening training’. The student who does not hear that he is playing a wrong note, for example, needs listening training. But also the student who is not conscious of the amplitude and frequency of his
vibrato; the student who unwittingly performs a lyrical melody with a sharp tone; the student who is unaware that he plays every crescendo accompanied by an accelerando and every decrescendo by a ritenuto; in short: the student who is unaware of the musical parameters he or she is applying and is unable to manipulate them consciously needs listening training. But, interestingly enough, these items are not treated in the aural training class although they lend themselves well to class instruction. In my discussion of an integrative solution to the curriculum, I will include the subject of listening instruction and the treatment of musical parameters.

**Playing by ear**

The comparison between language and music literacy points to another difference between language development and the musical development of the classical musician. In general, classical musicians are taught to *reproduce* sounds, not to produce them, while the child who learns his mother tongue is primarily taught to *produce* speech. And although parents may, now and then, encourage the child to repeat a word or phrase in order to improve pronunciation, in general comprehension and the ability to respond adequately are the marks of language development. It is an accepted fact a child will eventually master pronunciation perfectly without any formal instruction; so well in fact, that his or her geographic origin may be determined solely on the basis of it.

Historically, instruction in classical music has progressed from emphasis on both production and reproduction of sound to emphasis on reproduction alone, in particular on reproduction from notes. This development finds its background in the development of style, in particular the progression from the 18th century view of music as a phenomenon of nature, with the corresponding view of the musician striving to conform to the laws of form and taste, to the romantic view of the unfettered artist and the corresponding view of the musician as one striving to conform to the wishes of the composer. This development is paralleled by the development of music notation. In the 18th century, the unmarked score is the norm, while in later styles markings are almost excessive. In the 18th century, ornamentation and improvisation were not only accepted, but encouraged; in later styles, as Ravel commented to Cortot, ‘one should play the notes as written’.

Does this historical development imply that the mastery of the instrument and of music in general can be reached solely through the reproduction of music from notes? And that learning to play ‘by ear’ is unnecessary? The comparison with language acquisition should make us slightly wary of that view. The inability of some music students to reproduce a music fragment by ear is disturbing, not to mention the inability to manipulate it by, for example, extending it, ornamenting it, transposing it, accompanying it with an ‘improvised’ second voice, etc. The idea that this skill is God-given and cannot be learned is widespread among classical musicians and has had important repercussions for the curriculum. Including these ‘aural’ skills in the curriculum will be one subject of discussion in the paragraphs on integrative teaching.
Composition

While in language literacy, the ability to write follows logically from the ability to read, in music we consider composition to be a subject that the average musician does not necessarily have to master. We have accepted a situation in which the trained music teacher is often unable to write a simple duet or trio for his or her own pupils and is therefore wholly dependent on material available from publishers. The subject of composition has devolved into an approach we call ‘music theory’ in which, like football fans, we watch from the sidelines what others do instead of getting out there on the field and enjoying the game. This approach to the subject of composition will play a part in the discussion on integrated teaching.

Singing

Classical music as we know it harks back to primitive forms of expression known even to prehistoric, illiterate man. Song, dance and percussion are the basic building blocks of musical expression up to the present time. Pedagogically speaking, instrumental tuition should be preceded by a solid foundation in all three disciplines. The inability of many students to play cantabile, beat time and feel the pulse is a direct result of the omission of these aspects in the training of the young musician. It is poor economics to treat them remediably at the conservatoire during individual instrumental tuition given by highly qualified (and paid) experts.

Keyboard skills

Since the advent of harmony in western music, the keyboard has been the instrument of choice for the practical study of that subject. Pedagogically speaking, the student should progress from the concrete to the abstract. The abstract treatment of harmony should therefore be preceded by the concrete manipulation of actual chords on a music instrument. For the instrumentalist who is unable to play chords on his own instrument, playing them on the piano is the next best substitute. Keyboard skills should therefore be taught as early as possible; for those students who have received no prior instruction, the Young Talent Class is the place to start.

2. The master-apprentice relationship

We will use the term: ‘integrative teaching’ here to refer to an interdisciplinary and team-teaching approach to the problems created by specialization and division of labour. What exactly are those problems and how great are they? The terms ‘specialization’ and ‘division of labour’ refer to the developments that have taken place in society since the advent of industrialization and the relocation of labour in large-scale factories instead of in homes and shops where hand-made goods were manufactured by masters and their apprentices.
Unlike many forms of higher education in which specialization and division of labour have been more or less complete, music education has maintained to a certain degree the master-apprentice relationship between teacher and student in the principal subject lesson. At the same time, teacher-student contact has been greatly reduced, and various aspects of the profession have been delegated to other teachers with whom the student is not expected to develop the special master-apprentice relationship.

While the principal subject teacher is expected to integrate interpretation and instrumental technique and assess the student’s advances in both areas at the same time, it is commonly accepted that other teachers will make no attempt to do so. The theory teacher assesses the student’s progress in form analysis by means of an oral or written exam and not, for example, on the basis of the student’s playing.

From the perspective of the student, the master-apprentice relationship between him and the principal subject teacher is of a different order than the relationship with other teachers. Not only does the principal subject teacher exercise more authority than other teachers, but also, in terms of time spent by the student on preparation, the instrumental teacher commands a much larger percent of the student’s time and attention.

But also, from the point of view of integration of instrumental performance and secondary skills, the instrumental teacher functions as a role model for the student. If the principal subject teacher, for example, fails to demonstrate the necessity of applying aural skills to the study method, the student will assume that they are unimportant. It is therefore essential that the principal subject teacher be aware not only of the master-apprentice relationship, but also of his or her function as role model.

Instrumental teachers who take their responsibility seriously are prone to admonish the student regularly to ‘do your best’ in theory and aural-skill training, etc. This is what is called extrinsic motivation: the student tries to do well in ear training and theory because he wants to please the teacher whom he so admires (or fears). The effects of extrinsic motivation are limited.

It would be far wiser if the teacher would rethink the function of theory and aural skills in his or her own study method and make a serious attempt to demonstrate the advantages of that study method to the student. This is what we call intrinsic motivation: the student discovers that the teacher is able to play the solo entrances correctly in a concerto, because he is able to sing or play the tutti’s, instead of only being able to count the bars. Or he discovers that his teacher is able to play the bass line of the orchestra part by ear, while the student is only able to play his own part from notes, and therefore longs to be able to do the same.

The rethinking of the function of theory and aural skills in the study method has a secondary asset: the instrumental teacher will then be able to communicate to secondary-subject colleagues which skills are more important and which are less important. In the
paragraph on team teaching, I will go into the problem of communication between principal subject teacher and secondary-subject teacher in more detail.

3. Secondary subjects

Secondary subjects can be secondary in the sense that the student learns to play a second instrument or to control his singing voice; or it can be secondary in the sense that elements of the instrumental major such as sight reading may be treated in a second lesson, usually by a different teacher, and frequently in a class situation. We will first take a look at secondary subjects in the first sense of the term.

Singing or playing the piano (as well as dance and percussion) are activities that are useful because of the concrete nature in which they deal with musical reality. This is the reason they are frequently employed in the principal subject lesson and that is the reason every musician should be given ample opportunity to master them at an early age. Would it be useful to offer these subjects remedially to Young Talent Class students who have unfortunately missed that opportunity?

In the traditional curriculum offering these subjects would imply the addition of new lessons. In the integrative curriculum, the addition of a new ‘subject’ does not necessarily imply the addition of an extra lesson. On the contrary, the question of whether piano lessons should be included in the curriculum can be formulated as follows: is it possible to teach harmony in a piano-class situation instead of in a theory-class situation? The integrated curriculum offers the possibility of expanding the student’s horizon without expanding the curriculum. So the answer to the question is affirmative: certainly we will include piano and singing etc. in the integrated curriculum.

Motivation

Theoretical knowledge of music structure is a tool of the trade that has been delegated to specialists and is treated in lessons separate from the principal subject lesson. Teachers of these subjects are faced with the difficulty of motivating the student to apply himself to a task, the importance of which he is perhaps not convinced.

The remedy generally practiced, is to encourage the student to practice the art of analysis on his own repertoire in the vague hope that working on a piece he plays himself will encourage him to apply himself more diligently. The approach is well intended, but the results are often discouraging, especially for the teacher who has bent over backwards to make the subject as attractive as possible to the unmotivated student.

What is generally not understood is that the average student is completely unaware of any relationship between analysis and interpretation. Reference to analysis is rare in the principal subject lesson, and, for most students, practical interpretation is a question of
intuition and/or imitation. What then is the relationship between intuition, interpretation, and analysis and what are the tools the student needs?

**Intuition**

In their *Generative Theory of Tonal Music* Lerdahl and Jackendoff contend that the goal of a theory of music is the ‘formal description of the musical intuitions of a listener who is experienced in a musical idiom’.

The authors’ assumption is that the average listener comprehends music by means of rule-based ‘analysis’ of what he hears. Lerdahl and Jackendoff’s generative theory is an application of linguistic theory to music, the idea being that music comprehension is approached by the listener much in the same way as linguistic comprehension.

Comprehension is therefore not based on formal analysis of the perceived but on informal analysis. Similarly, the ability to speak a language does not rest on formal knowledge of the grammar of that language. Neither does the general ability to sing or play depend on formal analysis of the music. The first phase of the art of what we generally call ‘interpretation’ is therefore the ability to apply rule-based intuition to general performance, just as we do in speech.

The application of intuition to performance may be more complex than it seems. We have already noted that poor reading ability can have a negative influence on ‘interpretation’ and should be diagnosed as such by the teacher. In addition, teachers must constantly resist the temptation to write ‘expression’ marks in the score. Following the teacher’s written instructions is not the same as applying rule-based intuition oneself, though the musical effect may be somewhat satisfactory. The same can be said of imitation. Copying a teacher’s performance or that of a CD may lead to a satisfactory result; it teaches the student little about the application of intuition to performance.

The role of secondary subject teachers in the development of performance based on intuition should also be discussed. Teachers feel perhaps more comfortable talking about the ‘grammar’ of music for which an adequate vocabulary has been developed. But we should realize that formal analysis of music should be preceded by the development of musical intuition itself. Together with the principal subject teacher, secondary subject teachers should develop goals for the Young Talent Class that reflect a realistic evaluation of the current level of the student.

**Art**

As language becomes more complex through the use of metaphor, symbolism, and poetic license, comprehension of its deeper meaning requires a more advanced level of mastery of the language that can only be acquired with the help of formal analysis. For that
reason, the study of grammar, syntax and etymology, etc. generally begins in secondary school, where students begin to read literature.

Similarly, the comprehension of many works of musical art can only be understood with the help of the more advanced mastery of the ‘language’ of music that can be acquired with the help of formal musical analysis. Depending on their role in the performance of a work of art (composer, conductor, concertmaster, soloist, tutti violinist) musicians have more or less need of advanced knowledge of composition and analysis.

It is disturbing to note that, in the principal subject lesson, young instrumentalists are frequently required to play solo concerti and sonatas for which their theoretical foundation is inadequate, simply because of the technique they may be able to learn or demonstrate by playing them. It would be a great advantage if instrumental teachers could consult their colleagues on the choice of repertoire for the student, based on a realistic assessment of the student’s theoretical level. This is an item for the paragraph on team teaching.

4. Curriculum development

In previous paragraphs it has become clear that the integrated curriculum is not characterized by separate lessons representing separate skills: singing, piano, ear training, theory, etc. At the same time, the integrated curriculum does not represent a return to the master-apprentice relationship of the eighteenth century. To determine how the curriculum can best meet the needs of the Young Talent Class student, we must first determine what ‘subjects’ should be taught. And then we can look at possible solutions for an adequate curriculum, keeping in mind teacher competence and availability.

But first, let’s return to the comparison with language. Summarizing what we know about literacy, we might say that its development could be outlined in four phases:

- the pre-literacy phase
- the reading readiness phase
- the literate phase
- the advanced literacy phase

The pre-literacy phase refers to the preschool child who is learning to speak the language fluently without being able to read it. In the reading readiness phase, the child is brought to awareness of the various aspects of the language he has already mastered. He learns to hear that speech is characterized by sentences, that a sentence is made up of separate words, that words can have more than one syllable, that there are vowels and consonants, etc. In the literacy phase, he learns to read and in the advanced literacy phase he learns to apply the study of the language to the comprehension of literature.

If we could apply this mould right to music literacy, the task would be simple. The development of the child could be outlined in the same four phases:
• playing by ear
• ear training
• reading and writing music
• theory, composition

But, of course, most of our students fail to fit the mould. Most are unable to play by ear, have never had ear training but nevertheless are able to read notes. And although they have never had instruction in theory and composition, they are already performing art works from the standard music literature. This is the challenge with which we are confronted in the Young Talent class.

One solution can immediately be dismissed: the chronological method. We are all acquainted with it in the field of instrumental technique: instrumental teachers who force the Young Talent class pupil to give up playing repertoire and start all over from the beginning, because of the ‘disastrous’ method of the previous teacher. The chance that the pupil will continue with his studies or even continue to enjoy playing is minimal. Only allowing the pupil to play by ear, while he has been reading notes for years, would have the same effect.

The fact that students don’t fit the mould highlights the fact that the development of each student is different. Some play by ear, some don’t. Some are farther along in the reading readiness phase while others lag behind. And some already have a grasp of basic theoretical issues. Curriculum development will have to grapple with the fact that instruction must be tailor-made to fit the varieties of development with which we are confronted. An analysis of the student’s level in each phase will form the basis of a personalized plan.

In a traditional curriculum course offering would be based, for example, on three levels of instruction per phase: playing by ear I, playing by ear II and playing by ear III, and each student would be placed in the appropriate group following the entrance exam, depending on his level. We would need to offer twelve different lessons to accommodate the various possible levels of development with which we were confronted. In an extremely large institute it could be done. For most schools it would economically prohibitive.

But aside from the economics, this approach betrays a view of teaching in which the student is the clay and the institute is the potter; and our business as teachers is to fit the student into the mould we have prepared for him. And when we have done, put him in the oven and that’s the end of the learning process. As an exponent of lifelong learning, the author of this paper can hardly be expected to propose a curriculum in which that would be the goal. In an integrated-teaching approach, therefore, we will not explore the possibility of developing the student, but instead explore the possibility of enabling the student to develop himself.
Personal development plan

‘Lifelong learning’ proceeds from the belief that achievement is based on goals the student posits for his own development and not simply on goals the teacher or the institute posits for him. And that, although we grant certificates and diplomas based on well delineated levels and norms of achievement that the school or government has proscribed, nevertheless, those levels and norms only represent temporary goals in the ongoing process of personal development of the individual, which takes place over a whole lifetime.

To our minds, the goals to which the Young-Talent student himself aspires may seem vague; to him nevertheless they may seem quite concrete: he dreams of being able to play the violin like... Our task is not to rid him of that dream but to help him realize it.

But we can go much farther by helping him to discover the possibilities of using his instrument in a way that will not only further his career as a musician, but also lead to personal and social success. We want, therefore, to help him understand what ‘playing the violin’ means, and which goals he should aspire to in order to realize it. At the same time we want to give him some idea of how playing the violin can give him fulfilment in life: personal enjoyment, social and economic success, and help him develop goals with which he can achieve that fulfilment.

For many a young student, the goal of ‘playing the violin’ is mainly associated with the mastery of instrumental technique and/or emotional expression, and not with the mastery of the aural, lexical and theoretical skills he needs to do that. One main goal of the Young Talent Class should therefore be to clarify to the young musician what it means to be one. And in doing so, we should realize that the fact that he is not yet aware of what that means, is largely our fault.

We have not only relegated the relevant skills to stuffy classroom situations, we have also failed to confront the student intimately with role models at work; because of the importance lifelong learning ascribes to personal student goal development, every effort should be made in the Young Talent class to allow the young musician the opportunity to associate with professionals, offering him the opportunity to mirror his own abilities on their level of practice and encouraging him to formulate personal goals on the basis of that experience.

These goals should be formulated as ‘want-to-be-able-to-do’ goals, fields of competence the student feels he needs, to be able to become the ‘violinist’ he wants to become. As teachers, we can help the student translate these competences into sub-goals and set out a realistic blueprint of development that he can work on. Instead of trying to convince the student that he should be able to recognize intervals, tap rhythms, and pass ear training tests, we should offer the student a plan in which, for example, the various stages of reading readiness will lead to the lexical achievement he subscribes to, a plan he can work on himself.
One advantage of working with Young Talent is that our students are young and talented. We therefore want to encourage them to work on their own development independently, instead of only monitoring their studies in a day to day classroom situation. That means however, that besides helping them to define goals and sub-goals clearly, we must offer them self-study and self-assessment material that will allow them to pursue those goals independently, thereby reducing the demands teacher-to-student contact time makes on students already suffering from too heavy educational programmes.

In addition, the role of the teacher must be reconsidered. Where secondary subject teachers perhaps considered themselves responsible for the progress of the student in only one small area of his development, the integrative teaching coach will monitor the progress of the student as a whole, in relationship to the goals he wants to achieve. The coach is not merely interested in results, but in the actual study method, assisting the student in the development of efficient practice strategies, not on the basis of pre-developed instructions, but by fostering the growth of insight.

Team teaching

We have not yet attempted to propose a lesson schedule or determine which teachers teach what. In a certain sense we might consider that a moot point, more to be determined by economics, availability of teacher, student, and circumstances than by principle. A student, for example, who has not yet had the advantage of piano lessons and/or (choir) singing might benefit more from a lesson schedule in which he could participate in those activities than a student who has already learned to do so and can apply those skills in a self-study harmonization and sight-singing programme.

More important is the observation that the various teachers involved with the same student, work together as a team with common goals and methods, despite variations in personality and teacher competence. Together, the team can help the student develop goals and sub-goals, helping him to establish a study plan and choose the most practical lesson schedule, while conferring on a satisfactory selection of study material and methods of assessment.

What makes a team a team? Teachers working together in a team have common ideas about learning and teaching, in particular about lifelong learning and integrated instruction. Team members get together regularly for competence enhancement in the form of lectures, discussions, and team building activities. They share literature and experience with one another on a regular basis and meet to confer on their approach to individual students, even visiting one another’s lessons to establish a bond and demonstrate the unity of the curriculum to the student. One member of the team can be assigned to the student as mentor and be held responsible for personal contact with the student on a regular basis, for example by email, as well as for feedback to the team.

For the principal subject teacher, participation within a team can be an unusual experience, being used to the historically developed situation in which he is more or less
the sole authority and role model for the student, secondary subject teachers being a necessary interruption to the main work of training the instrumentalist. On the other hand, no other member of the team should be so aware of the skills necessary to the profession as this one member, who is expected to be an expert in that field.

Therefore the principal subject teacher has, more than any other member of the team, the responsibility of monitoring the personal development plan of the student to ensure that he is fully aware of the requirements the profession makes, especially those beyond instrumental technique, as well as that of assessing the motivation of the student to meet those requirements.

As a role model the principal subject teacher has a unique opportunity to demonstrate to the student how he listens, what he hears and thinks, and how he works, not only while performing, but also in the studio. This constant reflection of the professional stance in a person of authority can make a lasting impression on the eager student, even more so than the mere virtuosity of his playing.

The principal subject teacher also has the task of sharing his expertise with the team when it comes to defining the requirements made by the profession. At the same time he should realize that, maybe because of the changing cultural and educational scene, the future role of the student may demand professional skills the teacher himself does not even possess, and that it is his responsibility to make the student aware of that fact and to encourage him to imitate role models who do have those skills. He will also want to make an effort to acquire new skills himself, thereby becoming the epitome of the lifelong learner.

Awareness of the demands the future professional role will make on the student should be a major concern, not only of the principal subject teacher and the institute as a whole, but especially of the team responsible for his training. To that end the team can approach a colleague from outside of the institute, who can function as sounding board and an informant and who can not only meet with the team and participate in assessment procedures, but also confront the student himself with the ‘outside world’ he is preparing for, during master classes and an internship.

**Schedule**

In a traditional curriculum, following the principle of the division of labour, we might be tempted to offer a student as many subjects as possible, each taught by a specialist in that field: violin, solfeggio, harmony, counterpoint, etc. In the Young Talent class, we would be frustrated by the economic consequences as well as the student’s lack of time or availability.

In an integrative curriculum, however, we will keep teacher-to-student contact to a minimum, and instead of promoting an extensive division of labour, we will create a smaller team of teachers, each of whom can teach a specific skill or aspect of the
profession, for example violin, singing, piano, ensemble; but who, as a team, can support the personal development of the student in those aspects not immediately defined by the specific vocal or instrumental skills of the teacher, such as musical intuition, listening training, reading readiness, remedial reading, etc. On the basis of the personal development plan of the student, the various members of the team can assume specific areas of responsibility to which they will direct their attention in the lessons.

The principal subject teacher, for example, in addition to technical instruction, could be responsible for listening training and the development of the student’s ability to apply rule based intuition to performance. The teacher would coach the student in the recognition and performance of motives and phrases, his sensitivity to and manipulation of musical parameters, consonance and dissonance, rhythm and pulse, and the verbalization of his own musical experience, etc.

Directing the student’s attention to the whole score instead of only to his own part should be a major concern in the Young Talent class. To this end the principal subject lessons should be accompanied on a regular basis. In the weekly rehearsals with the accompanist, however, the student could be taught, not only how to prepare the score, but also how to deal with analytical issues and apply aural skills to the study method; discussing, for example, the role his part plays in the piece, becoming aware of his function within the harmony, learning to listen to his own part in relation to the bass and other important voices, etc.

In vocal ensemble lessons, students could learn not only vocal skills, but also practice sight singing and interval recognition, and ‘improvise’ cadences together in four-part harmony. In piano-class lessons students could learn not only basic keyboard skills, but also play and harmonize melodies by ear in addition to playing cadences. They could also learn notational skills and practice basic composition, for example: writing melodies and appropriate accompaniments and making arrangements. In instrumental ensemble lessons students could not only rehearse and perform together, but also practice sight reading and chord recognition, and even learn to improvise on the basis of chord progressions under the direction of a colleague from the Jazz department.

In addition to the regular lessons, the student could be assigned self-study aural- and lexical-skills practice material by the team. The student would then discuss his progress in those fields with the mentor assigned to him. As far as lesson frequency is concerned, some lessons could be given on a year-round basis, for example the principal subject lesson and lessons with the accompanist. Other lessons, like vocal or instrumental ensemble, or piano-class could be given in modules or trimesters of, for example, seven or eight weeks of intensive instruction with specific goals, with intermittent instruction-free periods in which the student could follow alternative modules or concentrate on other aspects. Participation in the various modules would be a specific result of goals laid down in the student’s personal development plan and the assessment of his progress.
Goals

The goals set forth in the student’s personal development plan reflect an assessment of the student’s progress in relation to specific goals for musicians in general. Curriculum development therefore begins with the establishment of goals to which performers and teachers in general and the conservatoire in particular subscribe. Goals and especially sub-goals should be formulated in terms of proficiency in the performance of a given task, making it possible for the student to assess his own progress.

The necessity of proficiency in the performance of a task must be motivated by the definition of its utility in relation to the student’s future profession. If, for example, the aural recognition of intervals could be assumed to be a sub-goal pertaining to ear training, it would be necessary to establish whether the interval should be recognized melodically or harmonically or both, and what the purpose of proficiency in this task would be in relation to lexical skill and performance in general.
Appendix

Reading Instruction

Playing ‘by ear’

The alphabetic system in use for the majority of the world’s languages is characterized by the ability to construct new words from the existing building blocks. Words never seen before are pronounceable and the system allows an infinite number of new or even nonexistent words to be spelled and pronounced without adding new symbols. This effect is reached by assigning a phonetic value to each letter. Decoding new or nonexistent words can then be achieved by decoding the letters one by one.

Reading known, existing words, on the other hand, is achieved by recognizing the word in its entirety. This has been demonstrated extensively by monitoring the eye movements during reading. The uniformity of spelling characteristic of modern language has made ‘speed’ reading possible as words appear only in one spelling pattern. Imagine how tiring and time-consuming it would be to read if texts were spelt in the following manner:

Eye halve a spelling chequer,
   It came with my pea sea.
It plainly marques four my revue
   Miss steaks eye kin knot sea.

Eye strike a key and type a word
   And weight four it two say
Weather eye am wrong oar write
   It shows me strait a weigh.

As soon as a mist ache is maid
   It nose bee fore two long
And eye can put the error rite
   Its rare lea ever wrong.

Eye have run this poem threw it
   I’m shore your pleased two no.
Its letter perfect awl the weigh
   My chequer tolled me sew.

Our music notational system is similar, allowing composers in the past to produce new music almost endlessly for several centuries without ‘noteworthy’ addition of new
symbols to the system. Just as in the alphabetic system, reading is achieved by recognizing known groups of notes: scales, intervals, chords, etc. New and previously nonexistent combinations of notes (unusual harmonies, passages or rhythms) are decoded at a slower rate, as the musician is forced to read the notes one by one. Uniformity in notation has made ‘speed’ sight reading possible. Imagine how difficult that would be if music were written like this:

![Musical notation example](image)

(For foreigners: this is the first line of the Dutch national anthem, written in the wrong key and time signature!)

The recognition of word patterns in language is enhanced by the fact that the individual commands a large vocabulary of words and phrases and actually speaks the language being read. This makes it possible for experienced readers to read across printing errors without even noticing them, substituting the correct word automatically. Experienced sight readers do the same in music. Printing errors in standard classical works may therefore go unnoticed for many years.

This ‘vocabulary’ of melodic and rhythmic patterns, intervals, and chords should not be confused with the visual note patterns corresponding to them. The diatonic scale, for example, is a musical reality whether you are capable of reading it or not. The ability to read the diatonic scale is dependent not only on the ability to decipher the individual notes belonging to it, but also on the inner presence of the scale in the mind of the musician and the awareness of the logic of its application.

For current information about how to create this ‘vocabulary’ in the minds of the young musician, we should look to our colleagues in the Jazz department as their approach to this aspect of music making is so much more specialized than ours. Even their (set theory) approach to the scale is an improvement on the classical approach which has more or less reduced the scale to a row (or multiple) of seven successive tones usually beginning and ending on the first tone. Incidentally, our Jazz colleagues have not delegated this aspect of performance to their secondary-subject colleagues, any more than we have delegated scale playing to a ‘scale’ colleague.
Reading readiness

Just as preschool children who speak their mother tongue fluently are unaware of the fact that a sentence is composed of words and words are composed of syllables and syllables are composed of letters, young musicians are frequently unaware of the fact that when they play together, the sound they hear is an interval and that all these intervals sound different and can be labelled. And when they play in an orchestra, all the instruments playing together are playing a chord and the harmony of the chord varies in a given rhythm. And some notes in a melody belong in the scale and others don’t, and some notes belong in the chord, and others don’t.

Although they are able to hear the effects of all these characteristics and the emotions they elicit, they frequently have no idea what the exact cause is of what they hear and feel and don’t even feel that knowing it would add anything to the experience. If a child already feels the emotional effect, for example, of a minor key and is already able to modulate the tone of the instrument to express it, what’s the sense of knowing that it is minor? In a certain sense, knowing it detracts from the experience and destroys the emotional impact; which is what it was all about.

But, of course, for reading it is indispensable. Recognizing the difference between major and minor visually must be preceded by the ability to distinguish it aurally and not just the ability to react to it intuitively. So the first step to literacy is ear training.

As was stated previously, ear training is a broad term, including the subject of the previous paragraphs: the mastery of the ‘vocabulary of music’; as well as aspects of literacy itself, for example, sight singing and dictation. Therefore we will use the term ‘reading readiness’ to define those aspects of ear training that must precede actual literacy.

Reading readiness is the ability to differentiate and label the musical structures the student is already able to manipulate intuitively. Being able to hear that a melody goes ‘up’ is, for example, a prerequisite to learning that the notes of the melody move upward. Hearing that a note is chromatic is a prerequisite to learning that the note is written with an accidental. Hearing that a chord is dominant or tonic is a prerequisite to recognition of the patterns of these chords as they appear on paper.

It will be obvious that for different aspects of reading readiness, the progress of the student will vary. No students in the Young Talent class will have difficulty recognizing that a melody goes up. They may (will) however have difficulty recognizing the dominant and tonic aurally. The fact that, judging by the repertoire they are playing, they should have learned that long ago is irrelevant. They have to learn it anyway. Otherwise they will simply never be able to read a score adequately, a fact they demonstrate regularly in the principal subject lesson.

As with all learning, the student must progress from the simple to the complex. If he has difficulty distinguishing the tonic and the dominant aurally, we might ask ourselves if he
is already able to accompany a simple melody with these two chords, a task he would be able to practice either in piano class or even with the help of a computer.

**Literacy**

The visual recognition of note patterns corresponding to music structures that can not only be manipulated intuitively but also aurally distinguished and labelled is the crux of lexical skill. The young student advances from the recognition of individual notes to the recognition of the patterns they make. The teaching of note pattern recognition is handicapped by the enormous variation in appearance note patterns can assume: there are any number of ways to write a C major triad, even when we avoid inversions, not to speak of the many key and time signatures in which music can be written.

In addition, the various clefs make it possible to write exactly the same notes in different ways, and when combining clefs as in piano music, auxiliary lines make it possible to write the same note either in one clef or the other. All these variations have parallels in language, of course, and that has not prevented generation upon generation of readers from mastering the skill of reading.

Students who have learned to read music in order to play an orchestra instrument tend not to see the intervals and chords notes create together, but instead only the pitch of the written note. The obvious reason is that in their part the notes are only presented successively. The technical difficulties or even impossibilities of playing actual intervals and chords make it unfeasible for the student to play them on his own instrument. One possibility therefore is for the student to practice this element of reading in the piano class lesson.

Another possibility is the creation of exercises in which the student is required to ‘improvise’ on intervals or chords written out in his part. This ‘improvisation’ can, of course, be a standard melodic motive that can be applied to each interval or chord the student reads. There are also a good number of standard etudes that could be ‘summarized’ in chords. The first bar could be written out and the rest of the etude printed as chords, from which the student would have to deduce the actual notes. If students have already learned to improvise from chord symbols, this exercise is a logical sequel.

A good exercise would be to play the etude, not only as it is intended, but also in various rhythmic and melodic variations, even varying the time signature or modality, but again, reading from a score written only in chords. It is easy to imagine the amount of insight the student would gain from this type of practice, and for the teacher, printing out such exercises is easy nowadays, although it might be even better for students to make ‘chord summaries’ for one another themselves.

Learning to read intervals and chords is not a question of learning to add up the note names, determine the chord, and then play it, which is what lots of students end up doing,
with disastrous results for their reading speed. Reading intervals and chords is similar to reading Chinese characters. The interval or chord is a picture which is taken in at a glance. One reason it is so important that the student practice this type of reading on his own instrument is that he should not be slowed down by technical problems he might experience while playing an unfamiliar instrument like the piano.

A rather extreme method is to teach the student this type of reading while learning to read new clefs. As the student is unfamiliar with the clef, he will tend not to depend on his knowledge of the written pitch, but, instead, use patterning to ‘guess’ what to play, which is exactly what we want him to do. Students generally learn to read a new clef satisfactorily within a semester and exhibit symptoms of new reading technique. Nevertheless, it remains to be demonstrated that there is carryover from this type of reading with the new clef to the reading of the known clef. We should be wary of drawing unfounded conclusions.

Although there are disadvantages attached to the practice of reading technique in the piano class situation, it should certainly be a goal of the lesson. It should however be pointed out that piano methods for beginners avoid intervals and chords, making them totally unsuitable. Practice material should include broken triads and intervals that can be ‘summarized’ by playing the tones of the chord all at once, instead of as written. In addition, chords can be placed high or low on the staff, making ample use of auxiliary lines, forcing the student to read by pattern instead of by pitch. With all reading exercises, we should remember that the student should not have the opportunity to actually practice the piece. The student should be practicing reading, not the piece.