Introducing the Music Therapy Visual Schedule Approach (MT-ViSA): Contexts and considerations for visual design and production

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ABSTRACT
Visual schedules have been used with different population groups within music therapy practice, mostly with people on the autism spectrum, however there is a paucity of focused literature on the use of these tools in the field. Drawing on a range of diverse information sources (e.g. literature, research data, practice experience), the Music Therapy Visual Schedule Approach (MT-ViSA) was developed. The MT-ViSA is a co-design approach to using visual schedules within music therapy practice. This article introduces the MT-ViSA and poses detailed questions under the four components of assessing, planning, delivering and evaluating; and visual design and production considerations for music therapists utilising a visual schedule within their work. This article suggests that a visual schedule may be of benefit to music therapy participants with different needs across the lifespan. It is anticipated that the outputs from this research will contribute to the evidence-base and practice approach of utilising visual schedules within music therapy service delivery.

KEYWORDS
music therapy, augmentative and alternative communication, visual schedules, visual timetables, visual supports, visual design

BACKGROUND
The utilisation of visual schedules (also known as activity schedules, task charts, visual timetables, or photo schedules) within music therapy practice is evident within the literature (Fuller & Short, 2020; Gadberry, 2011), however detailed information on approaches to the use of these tools is scant. Specialised training in the use of visual schedules for music therapy students and music therapists is lacking, and further focus on this strategy within practice for the benefit of participants is needed (McCarthy, 2013; Sweeney, 2015). Further writings indicate that within music therapy practice these tools are primarily used for people on the autism spectrum (Chapman, 2018; Kern & Humpal, 2019); however this is expanding to other groups including teenagers experiencing the effects of trauma.
(Wiess & Bensimon, 2019), young children with hearing loss (Fuller & McLeod, 2019) and families with complex needs (Fuller et al., in press). In the education and allied health literature, evidence can be found for the use of visual schedules more broadly, for example, within classrooms for typically developing children (Hall et al., 2012; Harper & O’Brien, 2015); with adults with mental health issues (Krupa et al., 2010), and with people with dementia (Bourgeois et al., 2001; Ellis, 2017; Swan et al., 2018).

In order to overview the background to this topic, this section will briefly explore the use of visual schedules within speech pathology, education and music therapy practice. For the purpose of this article the term ‘participant/s’ is used to describe the person or people attending music therapy services, in order to reflect the range of sociocultural contexts in which music therapy occurs (Spiro, 2020). Additionally, the term ‘activity’ is used to describe the different phases or types of music-making that take place within music therapy sessions; however, terms such as method, intervention or experience are also used across the writings in this field.

**Visual schedules within speech pathology settings**

Within the field of speech pathology (also known as speech and language therapy), augmentative and alternative communication (AAC) forms the foundation for therapists working with participants who require the use of strategies and tools to assist with expressive and receptive communication (Beukelman & Mirenda, 2020; Light et al., 2019). One AAC strategy established within speech pathology, is the use of visual schedules. These tools are now utilised in other fields and in home environments. A visual schedule can be described as a sequential arrangement of objects, photos, illustrations, line-drawings or text that depict the upcoming planned activities (Beukelman & Mirenda, 2020; Enome Inc, 2021; Nicholson et al., 2019). The use of visual schedules can assist people with complex communication needs in being aware of the upcoming activities or events, therefore reducing stress and anxiety (Nicholson et al., 2019; Rodgers, 2019). In order for visual schedules to be used effectively, writings from the field of speech pathology recommend that they are:

- meaningful to the individual/group and developmentally appropriate,
- used consistently at set points of the session/day (e.g. during transitions),
- easily accessible for participants and facilitators, and

Speech pathologists within consulting roles assist teachers on how to include individual and group visual schedules within their classrooms to support student learning outcomes (Rodgers, 2019).

**Visual schedules within education settings**

More recently visual schedules have been used for students within infants and primary school classrooms to further develop receptive communication and self-regulation (Harper & O’Brien, 2015). Teachers may initially choose to utilise a visual schedule if they have children in their class with a disability who require additional communication support. However, on observing the benefits of these
tools to a range of different students with different needs in the class, some educators have moved towards a whole-class visual schedule approach, as supported by online teacher materials from a range of education based websites (Heffron, 2016; Hume, 2018; Mae, 2016; Murray, 2019).

A well designed and located visual schedule of the daily learning activities can be viewed by students during and between learning tasks. These tools are often included as a focal point of the morning routine, and after each break period (e.g. morning tea, lunch) as a classroom management strategy. The use of visual schedules within the classroom may assist students to:

- increase their on-task learning time and independence,
- understand routines and expectations,
- transition smoothly from one task/activity to the next, and
- cope with changes in routines (Beukelman & Mirenda, 2020; Nicholson et al., 2019).

Some students within the class may require individualised visual schedules with more or less detail depicted on the visual materials. Within the ‘trauma-informed practice’ literature, writers suggest that visual schedules should be used within classrooms for children affected by trauma in order to visually support the routine of the classroom, and to lessen the stress and anxiety that might be experienced through not knowing what activities are planned for the day (Berger, 2019; Statman-Weil, 2015).

Visual schedules within music therapy settings

Music therapists have drawn from the speech pathology and education information base in utilising visual schedules within their practice, dependant on the individual communication needs of their participants (Gadberry, 2012; Luk, 2019; McCarthy & Geist, 2014). A recent survey (n=71) indicated that approximately two-thirds (62%) of respondents (Australian Registered Music Therapists) use visual schedules within their music therapy work for the purpose of supporting participation, and to decrease feelings of stress or anxiety for the participant (Fuller & Short, 2020). In addition, Gadberry found that almost half (47%) of surveyed music therapists use ‘task schedules’ in order to support participants with ASD to complete the discrete steps of a set music-based task within therapy sessions (2011).

Despite this reported use of visual schedules, there is a paucity of literature on this topic specifically focused towards the field of music therapy. This pointed to the need to develop what became the Music Therapy Visual Schedule Approach (MT-ViSA). The following section of this article will address the development, overview, components and visual elements of the approach.

MUSIC THERAPY VISUAL SCHEDULE APPROACH (MT-VISA)

Development of the approach

The MT-ViSA developed from a combination of practice experience, literature review, research data (survey, interviews and focus groups), and research diary entries (Figure 1). The information sources were merged using a pragmatic, iterative, cumulative research approach (Bazeley, 2018; Tashakkori et
al., 2020) underpinned by reflective practice (Corbin & Strauss, 2015; Hewson & Carroll, 2016) over the course of many years, culminating in the MT-ViSA.

**Practice experience**

As a registered music therapist (RMT), I have worked with various population groups, and learnings from these experiences have contributed to this approach (Benner, 2001; Wolcott, 2009). During my early years as an RMT while working in a school for children on the autism spectrum, I initially rejected the idea of using visual schedules in sessions, given I believed that music was the only tool that I needed. However, after observing the benefits of visual schedules for these children in other sessions/classes, and after consultation with the interdisciplinary team, I introduced these tools into music therapy sessions within my practice. My later work in using a visual flip-book schedule with children with hearing loss, and with families with complex needs, has also informed this approach (Fuller & Short, 2020).

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**Figure 1: Development of the Music Therapy Visual Schedule Approach (MT-ViSA)**

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2 This figure indicates the different information sources that contributed to the development of the Music Therapy Visual Schedule Approach (MT-ViSA), including reflections as noted within the research diary.
**Literature**

There is scant literature on the use of visual schedules within music therapy practice, therefore a range of writings (e.g. peer-reviewed journal articles, informally published web pages) from the fields of speech pathology (Beukelman & Mirenda, 2020; Binger & Kent-Walsh, 2010; McFadd & Wilkinson, 2010), special education (Hall et al., 2012; Harper & O’Brien, 2015; Hodgdon, 2015) and visual design (Friedman et al., 2015; Malamed, 2015; Stevens, 2020) have been incorporated into the development of the MT-ViSA. In drawing on these diverse writings I set out to develop a broadly applicable and richly considered approach that can be individualised to the needs of music therapy participants in different settings.

**Music therapy survey**

A survey was conducted with RMTs at a national music therapy conference, and included questions on the format and delivery of visual supports, such as visual schedules, within their music therapy practice (Fuller & Short, 2020). Findings from this survey on the importance of considering visual design have been included into the MT-ViSA, and are in alignment with the concepts of visual hierarchy (Soegaard, 2021; Stevens, 2020) and the picture superiority effect (Baadte & Meinhardt-Injac, 2019; Hockley & Bancroft, 2011). In addition, comments that reflected concerns that using these tools within sessions might negate the therapeutic benefits of the music-making have been considered in this process (Fuller & Short, 2020).

**Focus groups**

Focus group meetings were held on two occasions for the purpose of collecting parent viewpoints on what they consider to be the most beneficial visual schedule format for their child (Tashakkori et al., 2020). One group was considered to be families with complex needs (N=8), and was facilitated in a face-to-face setting (Fuller et al., in press). The second group was made up of families with young children experiencing hearing loss (N=4), and was facilitated via an online telehealth platform (Fuller et al., 2021a). A juxtaposed joint display (Bazeley, 2018) with emergent themes was developed after coding processes were finalised. These results informed the development of the approach by reinforcing learnings, while also challenging thinking (Fuller et al., 2021b).

**Interviews**

Semi-structured interviews (Brinkmann, 2018) were held with three staff involved with the aforementioned groups. The first interview was held with an experienced community organisation facilitator in a face-to-face setting. The following two interviews were held via an online platform with a qualified special education teacher, and qualified speech pathologist. Further information on responses to these interviews appears elsewhere (Fuller et al., in press). The interview results informed the development of the approach by again reinforcing and challenging learnings, though this time from professional and interdisciplinary perspectives.
Research diary

Within this diary, researcher-practitioner notes and contemplations were recorded, along with reflections on professional networking and personal communications (Engin, 2011; Rausch, 2014). This opportunistic data included conversations with professionals from the music therapy, art therapy, speech pathology, special education and visual design fields, and were included in the diary as anecdotal notes. Entries pertaining to the developing key aspects of the MT-ViSA were collected and arranged in themes for consideration, in consultation with the research team supervisors.

Overview of the approach

Within the Music Therapy Visual Schedule Approach (MT-ViSA), there are four components for consideration regarding using a visual schedule within music therapy programs: assessing, planning, delivering, and evaluating (Figure 2). These overarching component headings are common within the standards of practice of music therapy associations (American Music Therapy Association, 2021; Australian Music Therapy Association, 2020), therefore this approach sits consistently alongside other frameworks already used by music therapists. Within this approach, the music therapy participant, and parent, carer or case manager; and the music therapist engage in a collaborative co-designing process as the field moves away from the expert model to recognising and valuing participants’ agency, choice and control (Pickard, 2020). The MT-ViSA is not a ‘one size fits all’ framework. Use of a visual schedule within music therapy practice depends on the needs and choices of the participant. The approach is intended to be viewed as a broad range of considerations for individuals, with extensive opportunities for modification.

Figure 2: The Music Therapy Visual Schedule Approach (MT-ViSA) model

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3 This figure indicates the different components of the Music Therapy Visual Schedule Approach (MT-ViSA), all nested within the context of where music therapy takes place and the family and community systems.
Components of the approach

Reflecting on assessing, planning, delivering, and evaluating with regards to visual schedules, the opportunity exists for the music therapist to carefully consider the tools and delivery for a best-fit benefit for their participants. Anecdotally, some music therapists admit to being time-poor and are often rushed in their decision-making when it comes to using visual schedules within music therapy practice. Utilising the MT-ViSA may initially be time consuming. However with experience, processes for assessing and planning will become more streamlined, and in the long-term the benefits of designing suitable tools will reap participant benefits. As indicated in the model (Figure 2), the component of assessing is the focus prior to the program starting; while planning, delivering and evaluating are addressed as a reflexive cycle throughout the series of sessions. For the purpose of this article the components of the approach are listed in the order of: assessing, planning, delivering, and evaluating; however, this is an iterative and not a linear process. Music therapists are encouraged to access the components as needed throughout their delivery of programs. Within this approach a selection of questions are posed to the music therapist (Table 1) in order to prompt dialogue with the participant and collaborating facility, and to support decision-making across the four components of the approach.

Assessing

In considering if a visual schedule will be of benefit to an individual music therapy participant or group, the needs and choices of participants and their families are considered first during the assessing phase. The facility, therapeutic or educational approach may also be a factor for consideration. Consulting with other team members (e.g. speech pathologist, psychologist, teacher) is recommended in order to further understand the needs and current goals of the individual (Twyford & Watson, 2008). At the assessing phase, if the decision to utilise a visual schedule is made, it is time to move on to the planning component of the approach.

Planning

At this point considerations including sourcing, developing, and making tools are the focus. The visual schedule format (e.g. top-to-bottom, flip-book, to-do list) and symbolic cards (e.g. photos, illustrations, text) are decided on, and all factors with regards to appearance and durability are considered. Cost and accessibility are also factored into the planning phase. The needs of the participant also bear consideration over the hierarchy of symbolic materials including concrete to abstract, and static to dynamic (Utley, 2002). During this phase, the delivering component is considered simultaneously, to ensure best-fit decisions are made with regards to the format and symbolic materials.

Delivering

During the delivering phase, the practical aspects of how the visual schedule is integrated into the music therapy sessions are implemented. Considerations according to the needs of the participant include location, manipulation, reach-and-touch, and participant involvement (Hume, 2018). Questions on how the schedule will be used to assist with session flow, and not hinder it, are posed; along with making decisions about the accompanying verbal communication used when accessing the visual schedule. The component of delivering is most often simultaneously accompanied by evaluating.
Throughout the program or series of sessions, ongoing evaluating of each aspect of the visual schedule is valuable, as this will address the strengths and weaknesses of the developed tools while keeping the changing needs of the participant central to the approach. Within this phase the transferability of this strategy should be considered, assessing how it supports the participant when attending other
settings (Hodgdon, 2015). This may promote a sense of agency for the participant, and lessen the ‘fear of the unknown’ and anxiety concerning understanding and sequencing of the session plan.

Visual schedule elements

In designing a visual schedule ‘fit for purpose’ for the benefit of the music therapy participant/s the key materials of 1) schedule format, and 2) symbolic cards are to be considered.

Schedule format

A variety of different schedule formats can be of benefit for music therapy participants, depending on their needs, developmental level, and goals. For the purpose of this article, these formats will be further explored: flip-book, book style, top-to-bottom, left-to-right, to-do list. Other formats used within music therapy practice include low-tech floor schedules and activity box schedules; and high-tech iPad schedules and speech generating devices as schedules. Considerations when choosing the schedule format include the pragmatic issues of accessibility, portability and durability; and the costs of production or purchase. See Table 2 for visual design considerations when planning the visual schedule format.

Symbolic cards

The symbolic cards used on the visual schedule are often affixed by hook and loop fastenings, and preferably chosen in dialogue with the participant (and/or parent/carer), to best meet their developmental and goal-focused needs. These cards are often laminated for durability, with gloss or matte options. For the purpose of this article, these low-tech symbolic cards are included in the following figures: photo only, photo and text, illustration and text, text only. Other symbolic materials used within music therapy sessions include the use of real objects (e.g. instruments or props), software such as Boardmaker (Mayer-Johnson, 1989), or the use of album art (e.g. CD cover or online graphic). The hierarchy of symbolic materials from ‘concrete’ to ‘abstract’ are considered and chosen based on the needs and goals of the participant/s. Additional visual design considerations when planning the symbolic cards include layout, imagery and typography (Table 2).

The symbolic cards may be arranged onto the visual schedule prior to the session by the music therapist, at the start of the session with the participant/s involved, or throughout the session as the music-making progresses. As the session evolves the therapist or participants may decide to change the activities due to time constraints, creative or other factors. In these cases, techniques such as turning two pages on the flip-book, substituting symbolic cards, or rearranging the cards can occur.

A scaffolded approach to the introduction and use of the visual schedule over a series of sessions may be of benefit to the participants. For example, an eight-week session plan may follow this sequence with regards to the delivery of the visual schedule, in alignment with the ‘I-do, we-do, you-do’ principle (Goeke, 2009):

- Session 1: The music therapist or team member demonstrates the use of the visual schedule;
- Sessions 2 to 4: Music therapist or team member invites participants to use the visual schedule, accessing and manipulating the symbolic cards as the session progresses;
• Sessions 5 to 8: As above, and participants are invited to be involved in choosing the symbolic cards to be placed on the visual schedule prior to the session.

### Layout

**Overview:** When starting the visual schedule design process, addressing layout first, speaks to the gestalt construct of thinking of the whole, prior to focusing on the separate elements (Stevens, 2020).

<table>
<thead>
<tr>
<th>Size</th>
<th>When considering the overall size of the visual schedule and symbolic cards, decide on the schedule proximity from the participant/s and allow for any visual perception differences.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Spacing</th>
<th>Work towards having similar spacing between the different elements on the schedule or cards (e.g. spacing between images, text and borders).</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Intentional use of whitespace (e.g. the areas around the images and text) can assist with drawing the participant/s attention to the main focus content.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Alignment</th>
<th>What are the opinions of the carers or family of the participant with regards to a visual schedule?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>What information can other team members (e.g. speech pathologist, teacher) contribute?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Framing</th>
<th>Consider the need to include or omit frames on the schedule and boards on the symbolic cards.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>While frames can assist in usability, over-using this element may be visually distracting.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Visual hierarchy</th>
<th>‘Hero’ the most important element (e.g. image or text) of the visual schedule and cards by attending to size, spacing alignment and framing (as described above).</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Considering colour, background and foreground of each element and the design overall can assist in providing a clear visual hierarchy for the participant/s with the most important element for them ‘standing out’ first and foremost, before noticing the other elements.</td>
</tr>
</tbody>
</table>

### Imaging

**Overview:** The communicated visual message on the symbolic cards can be enhanced through considering image type, symmetry, colouring and size (Lidwell et al., 2010; Rallo et al., 2019).

<table>
<thead>
<tr>
<th>Image</th>
<th>Images used on symbolic cards may include a range of materials including photographs, illustrations; or line drawings of objects, actions or people.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Other materials such as ‘album art’ may be a useful image type within music therapy programmes.</td>
</tr>
<tr>
<td></td>
<td>Source or create symmetrical images if possible as these are considered to provide clarity and be more stable for the viewer.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Size</th>
<th>Balance the size of the image with the size of the text, remembering to ‘hero’ the most important element for the individual participant/s.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Colour</th>
<th>Endeavour to remove or fade the background of real object photographs for symbolic cards so as to ‘hero’ the most important element of the image.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>If available, choosing images that include colours with higher contrast (e.g. yellow on block) increases understanding if the schedule and cards are positioned at a distance.</td>
</tr>
</tbody>
</table>

### Typography

**Overview:** The readability of the text on the visual schedule and symbolic cards can be enhanced through considering font type, size, colour and formatting (Lidwell et al., 2010; Rallo et al., 2019).

<table>
<thead>
<tr>
<th>Font</th>
<th>Consider using commonly used fonts such as Arial, Calibri or Times New Roman. If the participant/s are used to seeing and reading these font types within other visual materials, they will find the visual schedule and cards to be more ‘readable’.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Serif (e.g. Times New Roman) and Sans-Serif (e.g. Arial) style fonts can both be of benefit to participants, and a combined use (e.g. Serif on the schedule and Sans-Serif on the cards) may assist in visual differentiation of the different types of information.</td>
</tr>
<tr>
<td></td>
<td>Consider other fonts if your participants will benefit from specific character formations (e.g. the ‘α’ in Comic Sans), and explore specialist fonts (e.g. FS Me <a href="https://www.fontsmith.com/fonts/fs-me">https://www.fontsmith.com/fonts/fs-me</a>) for specific vision needs.</td>
</tr>
<tr>
<td></td>
<td>Local education systems may use specific fonts in alignment with the locally taught handwriting style (e.g. NSW School Handwriting Font <a href="https://wfonts.com/font/nsw-school-handwriting">https://wfonts.com/font/nsw-school-handwriting</a>).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Size</th>
<th>Balance the size of the text with the size of the image, remembering to ‘hero’ the most important element for the individual participant/s.</th>
</tr>
</thead>
</table>

| Colour | The font colour used on visual schedules and symbolic cards for contrast and ease of readability is generally black, however other colours can be considered if they will benefit the participants. |

*(Table 2 continued)*
Table 2: Visual design and production considerations within the MT-ViSA

| Formatting | • Consider stance (upright or italics), character width (narrow or regular), and weight (lite or bold) when choosing the font style, remembering to strive for simplicity and clarity. |
| Pragnanz | **Overview:** The gestalt principle of ‘Pragnanz’ as applied to visual design speaks to the idea that a simple, clear and ordered visual tool can assist people to feel comfortable, therefore supporting understanding and visual processing (Lidwell et al., 2010; Stevens, 2020). |
| Simplicity | • Use the least number of different elements. Consider if images and text are needed, or if the music therapy participant/s would benefit from just one of these elements. |
| Consistency | • Keep layout, imagery and typography consistent throughout the visual schedule format and symbolic cards. If using a mix of different image types, keep other elements consistent. |
| Attention to detail | • Designing visual schedules with simplicity and consistency requires a high level of ‘attention to detail’. Cross-check all layout, imagery and typography settings across the schedule format and symbolic material prior to printing or preparing for digital use.  
• If making additional symbolic cards at a later date, still maintain the same settings for simplicity and consistency. |
| Production | **Overview:** When producing hard copy visual schedules and symbolic cards, practical considerations include paper stock choices and manual processes. For digital versions, the range of resources for web-based or digital design should be consulted (Rallo et al., 2019). |
| Paper | • Choose paper weight (from 80 gsm, standard copy paper, up to 350 gsm, card) based on participant needs (e.g. heavier card may be easier to grasp for some people).  
• Lower quality (cheaper) paper or card will bend & colourise (e.g. white paper becoming yellow over time) more easily. If durability and longevity are important, try to invest in quality materials.  
• Light-grey 80 gsm paper (e.g. Quill grey 90065) can be a good choice for the schedule, as this will allow a good level of contrast with the symbolic cards if printed on a white background. |
| Laminate | • Choose the laminate film thickness (from 80 microns to 250 microns) based on infection control requirements (e.g. thicker may be easier to wipe with disinfectant), durability, and budget.  
• Consider gloss and matte laminate film depending on vision issues of the participant and lighting in the music therapy space (e.g. potential glare issues with gloss laminate).  
• A ‘sealed’ laminated edge, extending beyond the printed paper, can be beneficial in keeping out moisture, and therefore may be a good choice for the visual schedule.  
• A ‘flush’ edge, where the laminate and paper are cut together, can be faster and easier to produce and manipulate, therefore may be a good choice for the symbolic cards. |
| Cutting | • For safety reasons, rounded corners on the symbolic cards should be considered if using thick laminate (e.g. 175 microns). However, if using thinner film (e.g. 80 microns) the corners of symbolic cards are generally pliable.  
• Always check the corners, follow facility policies and consult with colleagues regarding safety factors and visual resources.  
• Consider using a guillotine or paper trimmer for a consistent end-product.  
• A pair of good quality scissors are also an important tool in the visual supports kit, and a guide cutting template may assist with consistency.  
• Choose a time and place where you can concentrate and manage the repetitive task of cutting laminated visuals without making errors, as mishaps will send you back to the ‘printing’ stage. |
| Affixing | • Hook and loop fastenings (e.g. Velcro dots or continuous strips are often used to affix the symbolic cards to the visual schedule.  
• A consistent approach to the placement of the hook versus the loop on the back of the symbolic cards will aid usability and versatility of the created resources.  
• At times, it might be helpful to use the symbolic cards directly onto felt boards or front runner boards, therefore consistent practice would indicate that the ‘hook’ side is always attached to the back of the symbolic cards, and the ‘loop’ side to the visual schedule. |
Visual design and production considerations

In designing and producing visual schedules and symbolic cards for use within sessions, a general knowledge of the principles of design may assist music therapists in developing effective and aesthetically balanced visual tools. A range of different schemas are described across the literature with regards to ‘visual design elements’ or ‘visual design principles’ (Kimball, 2013). One example structures design information under the headings of size, colour, layout, spacing and style (Cao, 2015), while another utilises the framework of hierarchy, proximity, contrast, and balance (Interaction Design Foundation, n.d.). ‘Visual rhythm’ is another design element that appears within the literature (Soegaard, n.d.; Stevens, 2020) and has similarities to the musical element of rhythm. In employing a sequence of repetition and space a sense of rhythm can be achieved within both visual, and auditory mediums. Music therapists developing visual tools to be used within sessions can lean on their understanding of rhythm, and patterns of sound and silence, in order to tie together the visual and auditory experience for their participants.

A focus on designing visual materials for broad accessibility is also noted within the literature. Rallo et al. (2019) published a dedicated handbook on how graphic design principals can be utilised to communicate visual messages for diverse audiences. Sensory considerations (e.g. eyesight, hearing); cognitive considerations (e.g. development, cognitive load); typography (e.g. typeface selection and size); and use of colour (e.g. contrast) are detailed within the resource, with sections dedicated to digital and physical outputs.

Design principles may be thought of as guidelines, on which music therapists can apply their own discretion. By understanding their participants needs, and drawing on practice experience, music therapists can make effective visual design choices. When in doubt, the gestalt principal of ‘Prägnanz’ (simple and clear) should be applied. Gestalt is built on the core construct of ‘the whole being greater than the sum of its parts,’ and when applied to visual design speaks to “the way our brain organizes and simplifies objects by looking at them as a whole system” (Stevens, 2020, ch. 6, para. 2). The design elements included in Table 2 have been selected from across a number of sources and applied to the music therapy setting within the framework of the MT-ViSA.

Schedule format examples

Within this article, schedule format examples provided include: flip-book (landscape), book style (portrait), top-to-bottom, left-to-right, first-then, and to-do list. Other formats used across a range of settings may include: a colour coded school diary, a whiteboard with the activities of the day written up, a pinboard with a range of symbolic materials (e.g. post it notes).

Flip-book (landscape)

A flip-book is a landscape oriented set of laminated pages, stacked and kept together with binding, hinged rings or in a folder. Various sizes of flip-books can be used with various symbolic cards (Figures 3.1 and 3.2). A flip-book could be considered for music therapy participants who find it challenging to have too much visual information at any given time. Younger participants or others might benefit from seeing just one activity at a time so as to not become overwhelmed or to ‘get ahead’ of themselves. The delivery of this format involves the therapist or other team member holding the flip-book in a
position that is clearly visible to the participants, showing them the first activity. After each activity, they again hold the flip-book in order to give a clear visual indication of the next activity. It can be useful for the music therapist to demonstrate the ‘up and over’ motion of the pages before inviting participants to assist in this role. In some situations, it may be of value for the music therapist to flip through the pages at the start of the session so that participants can see the overall plan before the session starts.

**Book style (portrait)**

The book style is similar to the flip-book, though it uses a more common western approach for turning the page in a similar motion to reading a book (Figure 3.3). This format could also be considered for those participants who do better when there is less visual information, and who being in the ‘here and now’ (one activity at a time) is best. The book style is used in a similar manner to the flip-book with it being an integral part of the transition routine between the music-making activities. A handy tip for the book style and also the flip-book is for the music therapist to get into a pattern/routine of where the flip-book is placed during the music-making. This makes for streamlined transitions between activities without the stress of wondering: “where is the flip-book?”.

![Visual schedule examples](image)

**Figure 3: Visual schedule examples**

**Top-to-bottom**

The top-to-bottom schedule example includes a ‘Let’s Do’ and ‘Finished’ column; activity numbers and frames (Figure 4). This format is typically displayed on a wall or board in clear view. This provides the opportunity for participants to use the schedule as a visual reference throughout the session. After each activity, the symbol is moved to the ‘Finished’ column by the music therapist, team member or participant. It is recommended that the size, height and position are considered in order to make sure the symbols are within comfortable reach for the participant. As with the previous examples, light grey paper has been used for this schedule so as to provide a clear background that allows the symbols to stand out. A finished flag has been included in this format as a commonly used, sign of completion.

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4 3.1 shows a single photo of the real object, with text at the top of the photo.
5 3.2 is a cardboard version of the flip-book that was developed for home use. An illustration has been used with text located at the bottom.
6 3.3 is showing both a real object photo and an illustration of the same instrument, for use in supporting participants to transition from using photos to more abstract representations of instruments.
4.1: Start of session

4.2: After 3rd activity

Figure 4: Top-to-bottom schedule example

Left-to-right

The left-to-right schedule format (Figure 5) follows a more common western system for reading and may provide a suitable format for the development of literacy skills. Figure 5 shows the inclusion of a finished pouch, finished flag, and movable arrows (in green) to indicate the flow of the session. This example provided is simplified, with numbers and text omitted. Participants who like to be able to see the sequence of all the planned activities in advance may benefit from this schedule format. After each activity the participant can take the symbol of the completed activity and put it in the finished pouch before orienting towards the next activity at hand. Consideration of the height and wall space for schedule format is important.

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7 4.1 shows the eight planned activities in order.
8 4.2 shows the schedule after the 3rd activity, with three photos having been moved.
First-then

The first-then tool is considered a type of schedule in that it gives the sequence of a reduced number of events. At image 6.1 a 2-activity example is provided, while image 6.2 is of a 3-activity sequence. This form of schedule may assist participants who have a limited number of preferred activities, however are also working towards the development of other goal areas.

To-do list

The to-do list schedule in this example (Figure 6) is set out in a top-to-bottom format. Within this example a space for an activity bank of choices is provided, and a ‘Let’s Do’ and ‘Finished’ column, again with the finished flag. Participants who can read text and can cope with this much visual information may find this format beneficial for use in sessions. Similar to previous examples, after each activity the symbolic materials (text cards) are moved from the let’s do column to the finished column by the participant, music therapist or other team member.

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9 5.1 shows the planned activities in order and utilises photos of real objects (excluding greeting and farewell).
10 5.2 shows the schedule after the 2nd activity, with two photos having been moved to the finished pouch.
DISCUSSION AND REFLECTION

This article introduced the Music Therapy Visual Schedule Approach (MT-ViSA), with a selection of key questions posed to music therapists when considering the use of a visual schedule within their practice under the headings of assessing, planning, delivering and evaluating. In addition, visual design and production considerations for music therapists were provided.

Music therapists are using visual schedules within their work, however some have concerns, as noted in the survey information source (Fuller & Short, 2020). In developing the MT-ViSA, my intention was to provide music therapists with a broad framework that can be applied to different population groups; while also highlighting the importance of making decisions on visual schedules in collaboration with participants, their families/carers and other team members. I am inspired to hear of music therapy practitioners who consider the needs of their participants first when contemplating the use of visual schedules within sessions, and their own positioning/approach as a music therapist.

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11 7.1 shows a range of possible activity options.
12 7.2 shows the 8 chosen activities with the unselected ones to the left.
13 7.3 shows after 3rd activity, the visual cards (text) moved from the ‘let’s do’ to the ‘finished’ column.
second. As explained within the assessing section of the MT-ViSA, visual schedules are not always required with all participants within music therapy, and this is not a ‘one size fits all’ approach.

One concern regarding using visual schedules expressed in the aforementioned survey results is in respect to the flow of the music-making. Some respondents commented that using these tools may interrupt and hinder the creative aspect of sessions, and others suggested that visual schedules may divert the attention of the participant away from the music. In reflecting on my experiences of using visual schedules over many years, I too have experienced these apprehensions and situations within my work. However, as I carried on using these tools, I learned and developed strategies of flexibility to address these matters. For example, if there are session timing issues, two pages of the flip-book can be turned instead of one; or if the direction or focus of the music-making changes during the session, additional symbolic cards can be positioned close by ready to swap with those on the schedule. Including the participant in setting up the schedule at the start of the session, and in making changes to the schedule during the session should be the approach used where possible. My sense is that each of the concerns expressed by music therapists with regards to visual strategies, can be addressed and mitigated for the benefit of the participants. This warrants further investigation, and training for music therapy students and practitioners in the use of visual schedules is a consideration within the context of this discourse.

While this article is focused on the (MT-ViSA) specifically, further articles are planned as examples of this approach being used in real world settings, and will form the foundation of further doctoral research. In closing, music therapists are encouraged to consider the benefits of visual schedules for music therapy participants across different population groups. Further, music therapy related peak bodies and training institutions are asked to consider the provision of additional training for music therapy students and practitioners in the use of visual supports, specifically visual schedules, within an expanded understanding of music therapy practice.

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Εισαγωγή στην Προσέγγιση Μουσικοθεραπευτικού Οπτικού Προγράμματος (Music Therapy Visual Schedule Approach, MT-ViSA): Πλαίσια και σκέψεις για οπτικό σχεδιασμό και την παραγωγή

Allison M. Fuller

ΠΕΡΙΛΗΨΗ
Τα οπτικά προγράμματα έχουν χρησιμοποιηθεί με διαφορετικές πληθυσμιακές ομάδες στην μουσικοθεραπευτική πράξη, κυρίως με άτομα στο αυτιστικό φάσμα, παρόλα αυτά η βιβλιογραφία που εστιάζει στη χρήση αυτών των εργαλείων είναι ελάχιστη στο πεδίο. Αντλώντας από ένα εύρος διαφορετικών πηγών (π.χ. βιβλιογραφία, ερευνητικά δεδομένα, πρακτική εμπειρία), αναπτύχθηκε η Προσέγγιση Μουσικοθεραπευτικού Οπτικού Προγράμματος (Music Therapy Visual Schedule Approach, MT-ViSA). Η MT-ViSA είναι μια προσέγγιση συνεργατικού σχεδιασμού για τη χρήση οπτικών προγραμμάτων στην πρακτική της μουσικοθεραπείας. Αυτό το άρθρο εισάγει την MT-ViSA και θέτει λεπτομερή ερωτήματα σχετικά με τις τέσσερις συνιστώσες της αξιολόγησης, του σχεδιασμού, της υλοποίησης και της εκτίμησης· παραθέτει επίσης σκέψεις σχετικά με τον οπτικό σχεδιασμό και την παραγωγή για μουσικοθεραπευτές που χρησιμοποιούν οπτικά προγράμματα στην πρακτική τους. Το παρόν άρθρο προτείνει ότι ένα οπτικό πρόγραμμα μπορεί να ωφελήσει άτομα με ποικίλες ανάγκες σε κάθε ηλικιακό στάδιο της ζωής που συμμετέχουν στη μουσικοθεραπεία. Αναμένεται ότι τα αποτελέσματά αυτής της μελέτης θα συνεισφέρουν στην ερευνητική και πρακτική προσέγγιση για τη χρήση των οπτικών προγραμμάτων στις προσφερόμενες υπηρεσίες μουσικοθεραπείας.

ΛΕΞΕΙΣ ΚΛΕΙΔΙΑ
μουσικοθεραπεία, οπτικά προγράμματα, οπτική υποστήριξη, τηλε-υγεία, οικογενειακο-κεντρική πρακτική