Fink About It: Development and Evaluation of a Communications Curriculum for Healthcare Professionals

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Abstract

Background

Communication skills are of paramount importance in the medical professions. However, it is acknowledged that instruction on this aspect of care is often lacking, or suboptimal in medical curricula. There is often a large focus on content, without the ability to teach and assess practical components related to the ability to communicate.

Aim

This article proposes the adoption of Fink’s taxonomy as a curricular model for communication skills training for healthcare professionals.

Method

A literature review of existing curricular models and their potential application was undertaken in order to select the most appropriate choice for a communication module for oncology healthcare professionals. Personal reflection also had a role, as a radiation therapist and medical educator.

Results

Fink’s taxonomy of significant learning consists of five key steps in curriculum design, to guide medical educators in delivering effective teaching and learning activities. The application of these to a communication module for healthcare professionals is outlined here.

Conclusions
Visualisation of the "ideal graduate" is a powerful tool in curriculum design. Many medical educators have an intuitive feel for what this is, however the use of Fink's model provides the evidence base and structure to assist constructive alignment of teaching and learning activities.

**Keywords:** curriculum, communication skills, undergraduate

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**Main Body**

**The importance of communication skills training**

Good communication is a key component in the delivery of patient-centred, quality healthcare (Beck, Daughtridge, & Sloane, 2002; DiMatteo, 1998). The Institute of Medicine (IOM, 2001) describes this approach as encompassing "qualities of compassion, empathy, and responsiveness to the needs, values, and expressed preferences of the individual patient". It has been demonstrated that education improves communication skills of oncology professionals (Gysels, Richardson, & Higginson, 2004; Kiss & Committee, 1999; Rao, Anderson, Inui, & Frankel, 2007) and good communication skills have been linked to greater patient satisfaction, adherence to medical treatment, better outcomes, less litigation, reduced patient distress, and improved understanding (Epstein & Street JR, 2007).

**Curriculum design: product or process?**

There are many definitions and interpretations of the term "curriculum", since its inception (Tyler, 1949) ranging from curriculum as content only, to the experiences of students undertaking a course of study (Fraser & Bosanquet, 2006). For many academics, the curriculum refers to what must be covered, or the syllabus (Stark, Lowther, Sharp, & Arnold, 1997) and there can often be a large focus on content, and within what timeframe that content must be covered. This reflects the "product" model of curriculum, rather than the "process" model, the latter putting a greater emphasis on the learner, as well as one's personal view of teaching, and associated pedagogies. The product model has been instrumental in providing greater transparency and mobility for students, through the Bologna process, and subsequent development of the learning outcomes approach to defining course content. The demands of professional bodies, and accreditation processes, can have a large bearing on emphasising this model, as seen in the professional courses. Although product models are useful, they often overlook the important human aspects such as attitude, emotional response, and personal values, as highlighted by Hubball and Gold, who provide a more holistic definition: "a coherent program of study that is responsive to the needs and circumstances of the pedagogical context and is carefully designed to develop students' knowledge, abilities and skills through multiple integrated and progressively challenging course learning experiences" (Hubball & Gold, 2007). Knight (Knight, 2001) likewise espouses the advantages of a process model of curriculum design, as more intuitive for third level, highlighting that it is not only content that is important but transition to autonomy and the acquisition of transferable skills necessary for lifelong learning.

**The "ideal graduate"**

A variation of this approach is the backward design model (Wiggins, McTighe, Kiernan, & Frost, 1998) which is more easily adapted to professional courses, as it starts with the vision of the "ideal graduate" and contemplates ways
to design a curriculum that would potentially realise this vision. This backward design approach was deemed most suitable for the current Communication module in the second year, of the four year undergraduate BSc (Hons) in Radiation Therapy, based on Fink’s non-technical, humanistic model (Fink, 2003). Unlike Bloom’s taxonomy (Bloom, 1974), ranging from the highest, ‘evaluation,’ to the lowest, ‘knowledge or recall of information’ Fink’s taxonomy is non-hierarchical in design, with greater emphasis on the affective aspects, on metacognition (“learning to learn”), as well as the human dimension and empathetic responses, which is deemed more suitable for a Communication module for radiation therapy students. The key focus of this approach is on the learner, rather than the content.

’Suitable matter tentatively selected in the development process has importance only to the degree that a student can find meaning in it for himself or herself’ (Ornstein and Hunkins, 2004).

Background to the BSc in Radiation Therapy communication module

The Communication module is delivered in the second year of the four year BSc. in Radiation Therapy. It builds on the First Year "Psychology and Communication I" module which sets the foundations for the various interactions of radiations therapists with other healthcare professionals, as well as the psychological management of the patient. While First Year is mostly focussed on psychological theory and team-based communication aspects (i.e. many of the threshold concepts), the Second Year module is aimed more at communication skills for clinical practice. The module introduces students to a variety of relevant scenarios that they may encounter in the clinical environment. There is also a great emphasis placed on the ability to empathise with patients and become patient advocates in their future careers as radiation therapists. This five credit module is designed to help students gain confidence when dealing with patients and their families, as well as other members of the multidisciplinary team, and links to two of the main programme learning outcomes, as follows:

Reflect on your own professional and personal development, being cognisant of the importance of life-long learning

Communicate effectively with both patients and members of the multidisciplinary team, and be an advocate for patients ensuring their safety and wellbeing at all times

Clearly, there is a large emphasis on the ability to communicate in the overall programme.

When situated in the second year (see Fig 1), the goals of the Communication module are to provide a fundamental understanding and ability to communicate for future clinical practice. The curriculum is designed to reflect the acquisition of skills from "novice" to "expert"(Eraut, 1994). Its position within the curriculum is also greatly influenced by clinical practice, which increases in frequency after Second Year. Therefore, there is horizontal and vertical alignment, closely attached to clinical placement, where communication skills are reinforced, and there is an opportunity to actively apply what is learned in substantial blocks of clinical placement in subsequent years. Clark and Linn affirm that "Student learn best… when they are required to synthesize knowledge and skills learned in different places….”(Clark & Linn, 2003). Even though there is no further formal education regarding communication skills and psychosocial care of the patient after Second Year, it is reinforced in the clinical module and assessments (using a case study approach), thereby reinforcing concepts learned in Second Year, in a spiral fashion(Bruner, 1971).
Curricular redesign and application of Fink's taxonomy

During the past few years, a number of key changes were introduced in the Communication module, namely the introduction of service learning, role play (in class and as a form of assessment), and the communication workbook (linking communication skills to clinical practice). These changes were based on the application of Fink's curricular model (Fink, 2003). Fink’s model is comprised of five key steps in the initial design phase, the first of which is consideration of situational factors, which have mostly been addressed above i.e. context, scope and sequence, as well as the nature of the subject (combination of theory and practical), characteristics of the learner and the teacher. The second step is setting learning goals. Fink recommends that teachers devise these with the “ideal graduate” in mind: "What would I like the impact of this course to be on students, 2-3 years after the course is over?" Rather than take a content-centred approach (focussed solely on cognitive learning), it is recommended that these be more learning-centred and to that end, Fink devised a taxonomy of significant learning, based on six major types of learning that were considered to have meaning for students.

The learning outcomes were thus re-conceptualised with this taxonomy in mind (please see Table 1).

<table>
<thead>
<tr>
<th>Fink’s Domain</th>
<th>Learning Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foundation Knowledge</td>
<td>1. Describe the components of good communication and discuss the impact of poor communication on patients and work colleagues</td>
</tr>
<tr>
<td>Application</td>
<td>2. Communicate effectively across a range of relevant, and sometimes challenging, clinical scenarios</td>
</tr>
<tr>
<td>Integration</td>
<td>3. Integrate aspects of your clinical experience to date, to provide additional perspectives on the communication process</td>
</tr>
<tr>
<td>Human Dimension</td>
<td>4. Reflect on your previous perceptions of certain categories of patients e.g. older patients, and how this might influence the communication process</td>
</tr>
<tr>
<td>Caring</td>
<td>5. Empathise with the patient’s experience of radiation therapy and advocate for patients under your care</td>
</tr>
<tr>
<td>Learning How to Learn</td>
<td>6. Critically appraise all aspects of communication, using your knowledge of communication, clinical experience and the literature, to provide patient-centred care</td>
</tr>
</tbody>
</table>

A unique feature of this taxonomy is that each type of learning is interactive i.e. it may stimulate other types of
learning. Significant learning occurs when learning experiences promote interaction between the different kinds of goals, for example, acquiring knowledge alone is not enough, but when paired with a learning experience, such as hearing about the patient experience (i.e. caring), then lasting learning occurs. The pedagogy that teachers should employ to best enable students to achieve these outcomes is therefore task-based.

Assessment methods

The third step is consideration of assessment methods. Emphasis on defining assessment prior to developing teaching/learning activities, ensures constructive alignment i.e. that assessment and teaching/learning are closely linked so that assessment measures a defined learning outcome.

"What would the students have to do to convince me that they had achieved these learning goals?"

Again, this is based on the vision of the "ideal graduate". Incorporating this type of "forward-looking assessment" requires real-life contexts specific to radiation therapy, whereby graduates are required to demonstrate effective communication skills. Gibbs and Dunbar-Goddet, 2007 recommend a variety of assessment, but this must be matched by providing students with opportunities to practice new assessment e.g. building role play into classes as formative assessment. Bryan and Clegg, 2006 likewise emphasise the importance of choice, as well as the opportunity to reflect.

The assessment of the module was therefore designed, as follows:

1. **Role play assessment** on a variety of clinically relevant scenarios (30% of overall module grade: addressing all LOs from Table 1).

2. **Completion of a Service Learning (SL) reflective diary** (30% of overall module grade: addressing all LOs from Table 1, but with a particular emphasis on the human dimension, caring and learning how to learn).

3. **Completion of a Communication workbook** during clinical placement (emphasising integration), feeding into an end of year essay, summarising key communication principles and applications in oncology (40% of overall module grade: addressing all LOs from Table 1, with a particular emphasis on foundation knowledge). The workbook forms the basis of class discussion and provides adequate detail for same. It is also a valuable resource for students when completing their end of year essay.

Fink recommends that this assessment be open-ended, and not overly structured, allowing an element of individuality, creativity and imagination in the student’s response.

It is also important for teachers to create opportunities for students to engage in reflection and self-assessment. This also equips students with a lifelong skill that is central to the practice of a radiation therapist. Assessment of the service learning initiative was therefore based on reflection, and how the process of learning challenged students’ previous assumptions about older people.

Completion of a Communication workbook allows successful integration of clinical knowledge and perceptions on communication. Also, there is a time lapse between clinical placement and delivery of lectures, therefore this workbook provides a very useful reminder about scenarios that arose during placement that merit further discussion and problem-solving in class. The end of year essay is a valuable assessment of overall content-based knowledge, but it isn’t overly weighted, again not allowing too much emphasis on this, at the expense of learner-centred assessments.
Significant and lasting learning

The next step in module design is consideration of teaching and learning activities that promote significant learning that will last beyond the classroom in future clinical practice. Fink advocates new ways of teaching to promote significant learning, from the more traditional didactic approach, to a more active learning style. The latter has been shown to facilitate greater retention, and incorporates "[involving] students in doing things and thinking about the things they are doing" (Bonwell, 1991). Table 2 outlines the key activities for each learning outcome.

Table 2: Fink’s Taxonomy and Integrative Assessment, Teaching and Learning Activities

<table>
<thead>
<tr>
<th>Learning Goal</th>
<th>Assessment</th>
<th>Actual Teaching Learning Activity</th>
<th>Helpful resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application: Communicate effectively across a range of relevant, and sometimes challenging, clinical scenarios</td>
<td>Communication workbook Role play assessment</td>
<td>Case-based discussions and role play in class (with feedback provided)</td>
<td>Role play assessment guidelines for students provided on Blackboard Other learning resources identified above</td>
</tr>
<tr>
<td>Integration: Integrate aspects of your clinical experience to date, to provide additional perspectives on the communication process in radiation therapy and how it may be enhanced for optimal patient care</td>
<td>Communication workbook Role play assessment</td>
<td>Discussion of scenarios from clinical placement based on the communication workbook; peer to peer discussions</td>
<td>Clinical experience data</td>
</tr>
<tr>
<td>Human Dimension: Reflect on your previous perceptions of certain categories of patients, e.g., older patients, and how this might influence the communication process</td>
<td>Service learning reflective piece</td>
<td>Service learning and reflective piece based on perceptions of aging and the communication process</td>
<td>Age Action organisation and assigned &quot;learner&quot;</td>
</tr>
<tr>
<td>Caring: Empathise with the patient’s experience of radiation therapy and advocate for patients under your care</td>
<td>Role play assessment</td>
<td>Guest lectures by former patients; detailing their experience of radiotherapy with a focus on communication aspects; student reflections</td>
<td>Former patients</td>
</tr>
<tr>
<td>Learning how to learn: Critically appraise all aspects of communication, using your knowledge of communication, clinical experience, and the literature, to provide patient-centred care</td>
<td>End of year essay Role play assessment</td>
<td>How to become a self-directed learner with emphasis on metacognition and self-awareness, as well as the ability to build critical thinking skills in the analysis of information provided for cancer patients, from both the literature and learning activities</td>
<td>Online resources and library tutorials</td>
</tr>
</tbody>
</table>

Fink’s curriculum model emphasises the worth of real life exposure and educational opportunities beyond the classroom. Service Learning (SL) consists of collaboration between universities and community-based organisations, in a mutually beneficial, empathy-building partnership that encourage social accountability and altruism (Samra, Griffiths, Cox, Conroy, & Knight, 2013). This has gained wide acceptance in the medical education literature, enabling students to gain more of an appreciation of the social determinants of health and foster a sense of civic responsibility, accountability and caring for others (Leung et al., 2012). In SL, students encounter events that may conflict with and challenge their previous assumptions. Allowing the student the opportunity to reflect on these challenges and personal conflicts is an integral part of the learning process. The SL programme, is run in partnership with Age Action, a patient advocacy organisation for older adults, and consists of a four week intergenerational experiential learning and computer skills training programme for older adults (two hours per week). Students are
trained to become tutors for this programme, entitled "Getting Started"("Getting Started: A Computer Training Programme,"), and are partnered with their Age Action members for the 8 week duration of the programme. They also complete a communication skills lecture, focussing on older adults. Despite the fact that the majority of cancer cases occur in older patients(Yancik & Ries, 2004), most oncology professionals receive little training in the specific needs of older patients(Posma, van Weert, Jansen, & Bensing, 2009). There is a growing awareness that this must change in order to provide "age attuning" of the health service(Diachun, Charise, & Lingard, 2012).

The human dimension

The programme culminates in a feedback session, with opportunity for reflection on the insight gained. This is complemented by the reflective assessment regarding the experience, development of communication skills and attitudes towards older people. This type of learning (human dimension) facilitates "emotional intelligence," which Goleman (Goleman, 1995), describes as including self-awareness, motivation, empathy, and social skills, which is more difficult to achieve in the traditional classroom setting. Adding to this "human dimension" the introduction of patient perspectives was considered vital to promote empathy, and this is provided by former patients who deliver a workshop style lecture on their experience of radiotherapy, as well as their impression of the communication process at all stages of the patient pathway. "Empathy in medicine has been described as the ability, through our understanding or consciousness, to vicariously share the experiences of another human being"(Spiro, 1992). An ability to empathise with another human being is fundamental to good communication, and can be difficult to nurture and assess in third level education.

Sitting in the hot seat

Task-based instruction is key to Fink's vision of teaching and learning activities to promote significant learning. The use of role play and fictionalised case studies are well established pedagogic approaches in medical curricula, used extensively to provide students with the ability to communicate effectively (Lane, Hood, & Rollnick, 2008; Perera, Perera, Abdullah, & Lee, 2009). Using role-play gives students an opportunity to ‘practise’ and explore complex issues in a safe environment allowing learning to take place by provision of timely and sensitive feedback, as part of the process. It is known that role play "is capable of influencing participants' attitudes and emotions, whilst simultaneously promoting higher order cognitive skills"(Sellers, 2002) . A radiotherapy role-play scenario requires students to bring together knowledge of cancer care principles, understanding of patient perspectives and communication skills. It is therefore an ideal opportunity to assess integrative learning. As Sweeney et al (Sweeney, O'Sullivan, & McCarthy, 2015)stated: "There is no better way than to sit in the hot seat and really experience what it could be like in the real world". Other teaching and learning activities are summarised in Table 2.

Learning how to learn

"Learning how to learn" is the ability to equip students with the skills and desire for lifelong learning. Teaching and learning activities were designed so that the module would inspire student radiation therapists to strive continually to understand patient perspectives and their role in delivering appropriate care, of which communication plays a prominent role, throughout their future careers.
Bridging the gap between theory and practice

Ensuring integration is the final step in Fink’s curricular design process (see Table 2 above) Bridging the gap between theory and practice is a common theme in the classroom. Active learning sessions are built into each class, including discussion of clinical practice (via the Communication workbook), case based scenarios and communication challenges and small group discussions.

Take Home Messages

Conclusion

It is well known that higher education curricula tend to focus more on the cognitive domain, in keeping with the traditional focus on product based curricular models. However, not all learning experiences can be documented in this manner. Any communication skills module for health professionals must include the use of feelings; in particular the ability to empathise with the other: ‘emotion holds the key to a higher level of learning, through reflective dialogue’ (Brockbank & McGill, 2007). This paper aimed to outline the redesign of a Communication module, based on the application of Fink's Taxonomy. Giving up lecture time to incorporate varied active-learning activities, some outside the classroom, were designed to promote empathy, lifelong learning and patient advocacy. The aim was to provide a more integrated approach, so that students would "fink about it" more, and be better able to relate to the patient experience and clinical practice.

Notes On Contributors

Anita O’Donovan is a Radiation Therapist and Assistant Professor in the Discipline of Radiation Therapy at Trinity College Dublin. Anita co-ordinates communication skills training in the Discipline of Radiation Therapy, as well as other aspects of teaching on risk management, care of the older person with cancer and evidence-based practice. Her main research interest is geriatric oncology, more specifically geriatric assessment, education of oncology professionals, and the application of these measures in clinical practice. She is a member of Board of the International Society of Geriatric Oncology (SIOG).

Anita has a keen interest in older patient advocacy and incorporating "service learning" principles into her teaching, promoting intergenerational solidarity and the adoption of positive attitudes towards older people by future healthcare professionals. She is also involved in educational outreach for older people through liaison with Age Action Ireland and the Irish Cancer Society.

Claire Poole joined the Discipline of Radiation Therapy at Trinity College Dublin, as Assistant Professor, in November 2007. Prior to this she worked as a Radiation Therapist in London and Australia before returning to Ireland and working in Cork University Hospital. She co-ordinates clinical practice placements and clinical teaching for all four years of the undergraduate BSc programme in Radiation Therapy.

Claire's research interests include clinical assessment and education of radiation therapists and her Master's Thesis investigated competencies in Radiation Therapists. She is a member of board of the Irish Institute of Radiography and Radiation Therapy and a member of the HSE Health and Social Care Professionals (HSCP) Education and
Development Advisory Group. As a member of these and many other working groups, Claire has been involved in the development of policy documents relating to advanced practice and the education strategy for the HSCP. She is also an assessor of international qualifications for CORU—the organisation responsible for regulating health and social care professionals in Ireland.

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Appendices

Declarations

The author has declared that there are no conflicts of interest.

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