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## ASPIRE for excellence in curriculum development

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### ABSTRACT

The objective of the ASPIRE award programme of the International Association for Health Professions Education is to go beyond traditional accreditation processes. Working in partnership with the ASPIRE Academy, the programme aims to encourage and support excellence in health professions education, in part by showcasing and exemplifying best practices. Each year ASPIRE award applications received from institutions across the globe describe their greatest achievements in a variety of areas, one of which is curriculum development, where evaluation of applications is carried out using a framework of six domains. These are described in this paper as key elements of excellence, specifically, Organisational Structure and Curriculum Management; Underlying Educational Strategy; Content Specification and Pedagogy; Teaching and Learning Methods and Environment; Assessment, Monitoring and Evaluation; Scholarship. Using examples from the content of submissions of three medical schools from very different settings that have been successful in the past few years, achievements in education processes and outcomes of institutions around the world are highlighted in ways that are relevant to their local and societal contexts.

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Curriculum; curriculum planning; phase of education; undergraduate; profession; medicine; profession; veterinary medicine

## Introduction

The curriculum is an essential foundation for any programme of learning. It should provide a statement of the intended aims and objectives, experiences, outcomes and processes of the educational programme (Grant and O'Brien 2018). There are many published outlines of ways to approach curriculum development, which should be considered in preparation for any local initiative (Prideaux 2007; Hays 2016).

For example, one medical school described its curriculum reform as having three broad goals: (1) promote active learning and learner engagement, (2) establish early professional identity formation, and (3) develop physician competencies in an integrated and contextual manner while allowing for individualized learning experiences for the millennial student. They emphasised the importance of three elements in undergraduate medical education curriculum reform: (a) adequate planning to set the stage for innovation; (b) attention to the implementation process (literature review, faculty development, clarity of expectations and necessary resources; and (c) achieving intended goals by monitoring outcomes and modifying innovation based on such data (Fischel et al. 2019).

Thomas and Kern identified six steps for effective curriculum design: Problem identification and general needs assessment; Needs assessment of targeted learners; Goals and objectives; Educational strategies; Implementation; Evaluation and feedback (Thomas and Kern 2004). Successful curriculum development also requires explicit recognition of the context in which the programme will be delivered, particularly in relation to its relevance and

### Practice points

- Curriculum development and renewal are essential foundations for any programme of learning.
- The ASPIRE award programme aims to encourage and support excellence in education.
- Key elements for excellence in curriculum include: Organisational Structure and Curriculum Management; Underlying Educational Strategy; Content Specification and Pedagogy; Teaching and Learning Methods and Environment; Assessment, Monitoring and Evaluation; Scholarship.
- Key to success is involving the right people in the development process, with full support from the top down.

appropriateness in delivering graduates ready for practice in local, national and international settings, including those with limited resources.

A key objective of the ASPIRE programme of the International Association for Health Professions Education is to showcase and exemplify best practices in health professions education, working in partnership with the ASPIRE Academy to improve education process and outcomes of institutions around the world in ways that are relevant to their local and societal contexts. The ASPIRE curriculum development award is intended to recognise excellence in development of a curriculum for a programme which leads to the award of a primary medical, dental or veterinary qualification. Perhaps even more importantly, the overall objective is also to stimulate and support development and effective implementation of local systems of continuous quality improvement – <https://amee.org/aspire/>

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This article has been corrected with minor changes. These changes do not impact the academic content of the article.

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As pointed out by Jamieson (Jamieson 2023), for curriculum development to be an effective part of a prospective planned approach to quality improvement, curriculum teams should:

- Engage in discourse about their conceptualisation of quality improvement and their purpose in implementation and communication to stakeholders.
- Create opportunities for discussion about what is valued in the curriculum, its purpose and its centredness.
- Evaluate curricula against appropriate standards.
- Provide oversight and integration, while encouraging individual quality improvement activities and projects.

The importance of complementarity between external accreditation processes and local quality improvement in achieving educational value has been highlighted by Jung, who concluded that ‘accrediting agencies and medical schools must first be recognized as partners of an educational alliance working together towards common goals’ (Jung et al. 2020). The ASPIRE award scheme can play a valuable role in moving beyond accreditation towards excellence (Ahn and Ahn 2014).

### Elements of curriculum excellence with examples

Internal or external evaluation of any curriculum should utilise a framework with clear definitions of the elements used. Many such frameworks exist, including that used for the AMEE ASPIRE awards (2024), based on six domains (Figure 1).

The examples described in this paper are extracted from successful submissions received from three medical schools (a general term used to encompass all submitting institutions), with different contexts of location, size and approach to development processes. They are: School 1 – a large private (not-for-profit) international medical school based in south-central Asia; School 2 – a medium size medical school in North America, based in a university with a synergistic partnership between the state’s largest university and the state’s largest public hospital; and School 3 – a very large medical school in Europe with a 6 year undergraduate medical programme and two intakes of students per year.

Each described different overall objectives for their programme outcomes. For School 1 these were to provide a framework of knowledge and experience that would enable learners to understand concepts of biological and social sciences, and acquire technical skills and professional attributes necessary for addressing problems of primary health care, including health promotion and disease prevention, as well as gathering, understanding and evaluating new knowledge for applying that knowledge to problems of health and disease encountered in the future.

For School 2 these were to prepare physicians committed to improving the health and wellness of their family and community through creative teaching, innovative research and quality clinical care. The vision is to cultivate a culture of curiosity and commitment to others to transform the health and wellness of communities.

For School 3 these reflected major reform of a traditional discipline-based curriculum which resulted in a structure with modules organized in a spiral form to allow



Figure 1. Curriculum development domains.

and facilitate the progress of the student towards the defined programme outcomes, operationalized as a competency-based catalogue of learning outcomes and entrustable professional activities (EPAs) for entry into residency.

### Domains used for submission and evaluation

#### *Organisational structure and curriculum management*

- Effective structure for the day-to-day detailed management of the curriculum
- Effective management of recent curriculum changes.
- Effective involvement of all internal and external stakeholders.
- Adequate and effective support for curriculum development.

#### *School 1*

The application describes a clear curriculum structure and senior leadership, which is regularly reviewed through clear governance processes. The work of the curriculum committee is devolved to sub-committees, which regularly report to the central committee. The Department of Educational Development has representatives in each department and committee. They support faculty coordinators in managing all essential academic activities, including assessment.

#### *School 2*

The application provides evidence of effective involvement of a range of key stakeholders in the curriculum development, management and evaluation. There is a clear description of the resources available to support the curriculum with an outline of involvement of senior leadership in ensuring this.

#### *School 3*

There is a robust hierarchical centralised management structure for curriculum management with clear reporting channels to the Educational Executive Board and Faculty Council. Extensive curriculum change was undertaken

through a very well thought out process. It began with a pilot, in parallel with the original old-style course, enabling direct comparison to be made. The changes were managed by a multiprofessional project management team with educational expertise, using an 8-step process for each module (as per Kern's Principles for Curriculum Development).

Student involvement is central to curriculum development, implementation and decision making. Students are involved in all the main school committees, including assessment and serving as module co-directors. Patients are also involved as stakeholders in curriculum development/evaluation.

### **Underlying educational strategy**

- Educational principles and strategic approach underpinning the programme which are appropriate for the school and region.
- Well-defined educational aims and outcomes which align with the overall educational principles and strategic approach.
- Programme outcomes that have, at least in part, been defined by national/international bodies or are based on guidance from other external sources.
- Justification for the educational model that has been used in the design of the curriculum.

#### **School 1**

The application contains clear and explicit information providing justification for the curriculum design, appropriate to the environment(s) and culture(s). Clearly stated educational aims and outcomes align with the overall educational principles and strategic approach, to produce responsible healthcare professionals who are not only contributing members of society but go on to become the next generation of leaders in their field—all over the globe.

The course is structured to support development of cognitive integration by providing a balance of learning opportunities and integrating the learning of basic and clinical sciences, enabling students to link theory and practice. The programme outcomes relate to practical experience of working with patients throughout all years. Students are strongly supportive of the range of initiatives to enhance learning, including peer-teachers and team activities.

#### **School 2**

The programme philosophy is clearly described. This is in direct response to the health needs of the local and regional population. The aims and outcomes are clearly articulated and align with the overall strategic approach. They encompass effective implementation of social responsibility, research attainment, community involvement and readiness for postgraduate education. There is a deliberate focus on preparation of learners for practice after graduation, as well as for lifelong learning.

#### **School 3**

The programme has been designed to meet the needs of the country as a whole. Graduates are trained for both hospital and community settings, plus some end up in research. It has a strong focus on communication skills,

practical skills and research skills. The teaching formats promote constructivism. The new curriculum thus leads to a much better balance between theory and practice, between knowledge, skills and professional behaviour.

The curriculum is 'operationalised' through 12 Entrustable Professional Activities (EPAs). These were summarised in the submission, with much more detail provided in the appendices (including further publications).

### **Content specification and pedagogy**

- Integration of the programme, both horizontally and vertically, which facilitates cognitive integration.
- Emphasis on teamwork as key to the educational process, interprofessional or otherwise.
- Evidence of student-centredness.
- Student choice within the programme.
- Patient-centred focus throughout the programme, including the early years.

#### **School 1**

The major bulk of teaching/learning is based on patients. In keeping with the Inquiry-based pedagogy, students analyse paper-based cases starting from the first module. Based on collaborative and integrative pedagogies, virtual patients are utilised.

Interprofessional education (IPE) is recognized as a continuum throughout the education programme, involving learning with and from other health care learners and professionals, including nurses, pharmacists and laboratory scientists.

#### **School 2**

There is good evidence that the course is fully integrated horizontally and vertically. There is good evidence of how students encounter patients in a real-world context throughout the programme, in addition to exposure to simulated patients and on-line patient cases.

Interprofessional teamworking is embedded within the curriculum and there are some excellent examples of how this is implemented.

#### **School 3**

The spiral curriculum is both horizontally and vertically integrated. There are joint lectures between disciplines, often between a basic scientist and a clinician, demonstrating that clinical science- basic science integration is taking place and teachers are aware of the integrated learning outcomes.

Clinical experience runs through the entire 6-year programme. There is a progressive exposure to patients throughout the programme, from 'paper patients,' through simulated patients to real patients on the wards. All medical students do a 3-month nursing internship in Years 1 and 2. This prepares students for working in interprofessional teams later in their programme.

There is evidence that this is a very student-centred programme. Student choice includes a range of elective courses. Peer teaching is valued and encouraged, and there are opportunities for students to design their own educational programmes in electives, according to their interests.

### **Teaching and learning methods and environment**

- Clear rationale for choice of teaching/learning methodology.
- Clear rationale for the distribution of clinical learning opportunities among hospitals, clinics, the community and, if appropriate, abroad.
- Clear description of, and rationale for, the nature and extent of e-learning in the programme.
- Appropriate learning environment and climate for the delivery of the programme, including learning spaces. student safety, respect and freedom from intimidation and harassment.

#### **School 1**

A wide range of learning methodologies is mostly student-centred, involving active learning. The application clearly specifies how knowledge, skills and attitudes are taught, with appropriate methodology for each.

Students are exposed to patients and conditions that are extremely diverse from a socio-economic perspective, thereby making them aware of the health care needs of this population. Students attend family medicine and paediatric clinics in underserved communities, so they are exposed to a diverse population in multiple settings. Their time spent with nurses and other health care professionals helps them understand about teamwork.

There is a clear anti-harassment policy in place and adhered to. The safe disclosure system allows confidential reporting.

#### **School 2**

The application provides a good rationale in support of the distribution of clinical learning opportunities across different settings, linked to the core curriculum themes and programme philosophy. A clear breakdown is provided of how time is allocated in the clerkship years, and this is in line with the programme aims. There is evidence of national recognition of innovation, range and resourcing of teaching and learning methods and the self-learning modules.

There is a clear description and rationale for online and web-based learning materials used to deliver the curriculum, including during clerkships. A number of staff have won awards based on innovative e-learning approaches.

#### **School 3**

E-learning is used throughout the programme. Aside from lectures, a learning management system is used for presentations, recordings, quizzes, readings and videos. Sufficient faculty involvement is seen in developing learning material.

There are systematic processes for student support and safety. There is a reporting system for reporting incidents and problems anonymously.

### **Assessment, monitoring and evaluation**

- Assessments which are matched to the programme learning outcomes, including those associated with clinical attachments, projects & electives and professionalism.
- Clear policy for timely feedback of assessment results to students and faculty, which is adhered to.
- Assessments which are quality assured, both internally and externally.

- Regular and effective monitoring and evaluation of the curriculum, with recent examples.
- Evidence of quality improvement as a result of regular evaluation.

#### **School 1**

The application demonstrates congruence between the outcomes, curriculum delivery and assessment. There are clearly defined policies for formative and summative assessment. All summative assessments are subject to internal post-assessment psychometric review and there is a process of dealing with poor questions/stations before finalising results.

There is continuous monitoring and evaluation *via* curricular reviews, pre-hoc and post-hoc reviews of summative assessments, stakeholder feedback, and periodic internal and external reviews. After receiving stakeholder input, a summary of the observations and feedback is made by the reviewers and shared with educational leadership for appropriate action. Action points are then shared with all stakeholders, including students, teachers, curriculum leadership and administration.

#### **School 2**

Assessments are matched to the programme learning outcomes, including those associated with clinical attachments, projects, electives and professionalism. The curriculum outcomes are mapped to a high level of detail from individual sessions to programme-level outcomes. This detailed mapping process has enabled a high level of curricular alignment with blueprinting of exams against the outcomes expected at different levels. There is a clear description of how knowledge and skills outcomes are assessed.

Assessment results are fed back to students and teachers in a timely manner. There is a clear system in place to prompt faculty to complete student performance reports and there is evidence of a robust system in place to track compliance with the policy. There is good evidence of robust internal QA processes in place for coordination of assessment information from individual modules/clerkships, as well as longitudinal data to create meaningful performance reports for module, subcommittee, and Curriculum Committee review.

There is an effective process for monitoring and evaluation of the curriculum, including reference to external outcomes. A number of examples are identified of changes being implemented.

#### **School 3**

The whole programme is based on outcomes and assessment is clearly matched to them. Assessments are based on learning objectives (i.e. blueprinting) and all questions are reviewed by a core group from theoretical and clinical specialties, then the module chairpersons and subject specialists. Question writers undergo focussed training.

All summative assessments are subject to structured post-application review and quality control, including a psychometric analysis of the assessment results. Feedback is detailed and available on-line. Students get a detailed overview of their strengths and weaknesses in the acquisition of knowledge and practical skills.

Curriculum evaluation is systematic and detailed. Quality Assurance is a continuous process.

Student module co-directors play a pivotal role in evaluation, providing a key link between students and faculty and ensuring issues raised by students are acted on (completing the feedback loop). Students not only carry out curriculum evaluation, but also take part in addressing the issues raised and finding solutions.

### Scholarship

- Encouragement and promotion of medical education research which has impacted on curriculum development.
- Institutional promotion of excellence in medical education, with effective processes for maintaining standards in teaching, learning, assessment and evaluation, using faculty devoted to the dissemination of good practice.
- Faculty development strategy for those involved in key educational roles such as small group teaching, assessment and lecturing.
- Educational scholarship which is seen as an integral part of faculty appraisals and effectively recognised by the institution as a criterion for promotion.

### School 1

Educational scholarship is a stated requirement in faculty appraisal and criteria for promotion and the guidance for promotion reflects this. The comprehensive promotions policy fully recognises teaching contribution, for clinicians and non-clinicians, who have key educational roles.

The University strives to maintain and enhance the standard of health professional education by developing faculty through a variety of courses. Faculty and staff can attain medical education research support through a range of grants and awards.

### School 2

The application provides evidence that clear research goals are set and aligned with regional priorities as defined by regional health priorities of the population.

The institution promotes excellence in medical education by encouraging core faculty to participate in national leadership programs. Clerkship Directors and Clerkship Coordinators are also encouraged to attend their national medical education meetings and return with ideas to share. Faculty are supported in participation in an annual week of development offerings and related meetings. During this time, they engage in a curriculum retreat, during which internal and external research is used to inform discussion as to the current state of the curriculum and possible improvements.

There is good evidence of investment in faculty development with a clear strategy and programme in place. There are some dedicated leadership roles associated with faculty development and some evidence of faculty development opportunities for clinical staff. As part of the system of appraisal, there is recognition for educational scholarship which is considered through annual reviews and through the promotions track.

### School 3

Students are contributors to research, both by being subjects and as researchers. There is solid evidence of their active participation.

Educational experts are in positions of leadership and drive curriculum change. There is a faculty development programme which has been externally accredited.

### Discussion

How students learn has changed radically over the years. The move away from traditional discipline-based teaching towards much more integrated systems-based teaching has had a profound effect on medical education. The effectiveness of community-based education has also been recognised, as has the value of interprofessional education. With the massive developments in information technology, the widespread use of mobile phones and the internet, even Artificial Intelligence, it is important not to ignore these developments but to embrace them and adapt curricula to them, recognising that students tend to learn from on-line resources rather than textbooks. Assessment too has evolved—again moving away from paper-based assessments to on-line assessments. Clinical assessments have become much more reliable and valid, but also much more labour-intensive. And professionalism is now high on the assessment agenda for many medical schools.

All of this has further emphasised the importance of excellence in curriculum development. This is not to inappropriately force the curriculum for any School to fit with any particular model in any of the six domains identified here, but instead to ensure that careful thought and planning take pace to design, develop and effectively implement a model which takes account of international best practice, translating this into a structure and processes which are appropriate for the specific context in which it will be delivered. Genuine widespread involvement of the wide range of key interests, including those who will deliver the programme in college and clinical environments is essential to success in this.

Sklar has pointed out 'Probably the most important stakeholders for curriculum change are the students who will be affected by the new curriculum' (Sklar 2018). He emphasised that, as the major stakeholders in the curriculum, students must always be included in all phases of the planning, implementation, and evaluation of curriculum change. No curriculum development project can be judged successful in the absence of evidence of effective implementation, including the perspective of the students who have experienced it themselves.

Effective demonstration of excellence in curriculum development, whether for external processes or as part of internal quality improvement, requires careful review of all the above aspects. It can sometimes be useful for those considering applying to imagine themselves in the role of the panel members, asking whether the planned submission would enable them to conclude that the evidence across all six domains, and including the student perspective section, would be likely to satisfy the standard necessary to recommend the award.

For those considering submitting an application for an award, it is essential to give careful attention to the requirements specified in the application form and associated guidance document. These are described further on the ASPIRE website. For some, this may be most successfully achieved through alignment of the submission process with the need to develop similar documentation and

evidence for other processes, for example accreditation or internal/external quality assurance/improvement.

In our experience to date, in the minority of cases where an award has not been made, some of the factors contributing to this decision have included:

- Inadequate demonstration of excellence across all six domains, sometimes with the major focus of the application being on a small area of development.
- Lack of clarity and/or evidence supporting claimed excellence, including appropriate student contribution to the application.
- Limited evidence of planned evaluation of the effectiveness of change.
- Insufficient time to demonstrate effective implementation of the described developments.

## Conclusion

Since its commencement in 2017, a total of 9 submissions have been evaluated by teams consisting of between 3 and 5 members of the panel. Of these, 6 have received an ASPIRE award for excellence in curriculum development. Details of recent awards are available from the ASPIRE Academy section of the ASPIRE website. Evidence of good practice has been identified in all submissions and feedback has been provided to all submitting organisations. We hope that this is received as constructive contribution from colleagues to support internal processes of quality improvement, which is a key objective of the awards process.

There is no single way to design an undergraduate medical, dental or veterinary curriculum. A curriculum has to match the needs of the school, which in turn have to match the needs of the graduates and of the healthcare service, be that local, national or international. Basing curriculum development on the six ASPIRE domains can support those involved in thinking through their local approach to developing a new up-to-date, perhaps ground-breaking curriculum.

Key to success is involving the right people in the development process, be they teachers, trainers, clinicians, students, recent graduates, other healthcare professionals, medical educationists, lay people, members of the local community, external advisors. Getting the right people on board, with full support from the top down, provides the best context and culture for a successful product and outcome for students, faculty and the societies they will serve.

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## Notes on contributors

*John Jenkins* is Honorary Professor at the Royal College of Surgeons in Ireland University of Medicine and Health Sciences. After training in paediatrics and paediatric intensive care in Belfast and Toronto, he was appointed Consultant Paediatrician in 1982 and subsequently Senior Lecturer in Child Health at Queen's University Belfast. He has remained actively involved in the development and delivery of the continuum of medical and wider healthcare education, including as President of the Association for the Study of Medical Education. He chairs the AMEE panel for Recognition of Excellence in Curriculum Development in a Medical, Dental or Veterinary School and is an accreditation assessor and consultant on the Medical Council of Ireland expert panel. His focus includes interprofessional education and collaborative practice, particularly the importance of its inclusion as a key element of policy and safety agendas internationally, and identification of the additional skills and support needed for its educator community of practice. As a member of Interprofessional.Global he has contributed to development of the Winterthur-Doha declaration which was launched at the All Together Better Health conference in Qatar in November 2023.

*Sharon Peters* is Professor of Medicine at Memorial University where she has been involved in undergraduate and postgraduate education for over 40 years as a teacher, mentor, curriculum developer and advisor, assessor and evaluator. In her roles within the faculty she has had extensive involvement in preparing for accreditation in undergraduate and postgraduate programs. She has also been an accreditor for external accreditation authorities, national and international. Educational projects include development of a new undergraduate curriculum at Memorial, applying for and receiving approval for a new subspecialty training program, General Internal Medicine, and active committee participation in the newest ASPIRE award (AMEE) in curriculum excellence—developing criteria and evaluating applications. She received the 2015 RDOC Mikhael Award for Medical Education recognizing her contribution to medical education.

*Peter McCrorie* obtained a BSc in Biochemistry at Glasgow University and subsequently a PhD in Biochemistry at St Thomas's Hospital Medical School. He moved to The London Hospital Medical School to take up a post as a Research Assistant in Haematology and subsequently as a Lecturer/Senior Lecturer in Biochemistry. After a spell as Curriculum Coordinator for Barts and The London Medical School, he became Head of the Centre for Medical and Dental Education. In 1999 took up the post of Director of the 4-year MBBS Graduate Entry Programme at St George's University of London. He was granted a personal chair in Medical Education in 2002 and was Head of the Centre for Medical and Healthcare Education until August 2012. Since 2015, he has been Professor of Medical Education at the University of Nicosia Medical School. His roles at UNic include advice & support, quality assurance, staff development & training and assessment. He also works on a consultancy basis for the General Medical Council, having been involved in the Quality Assurance of eight UK Medical Schools. He has been involved in course development internationally, including Russia, Romania, Macedonia, Brunei, Australia, Canada, Japan, Ireland, Portugal, Malta and Cyprus.

## References

- AMEE ASPIRE to Excellence Awards. 2024. [accessed 2024 Jan 15]. <https://amee.org/aspire/>.

- Ahn E, Ahn D. 2014. Beyond accreditation: excellence in medical education. *Med Teach*. 36(1):84–85. doi:[10.3109/0142159X.2013.830177](https://doi.org/10.3109/0142159X.2013.830177).
- Fischel JE, Olvet DM, Iuli RJ, Lu WH, Chandran L. 2019. Curriculum reform and evolution: innovative content and processes at one US medical school. *Med Teach*. 41(1):99–106. doi:[10.1080/0142159X.2018.1444268](https://doi.org/10.1080/0142159X.2018.1444268).
- Grant J, O'Brien BC. 2018. Principles of curriculum design. In: Swanwick T, Forrest K, editors. *Understanding medical education: evidence, theory, and practice*, 3rd ed. Oxford, UK: Wiley Blackwell; p. 71–88.
- Hays R. 2016. How to review a medical curriculum. *Asia Pac Sch*. 1(1): 23–25. doi:[10.29060/TAPS.2016-1-1/SC1009](https://doi.org/10.29060/TAPS.2016-1-1/SC1009).
- Jamieson S. 2023. State of the science: quality improvement of medical curricula – How should we approach it? *Med Educ*. 57(1):49–56. doi:[10.1111/medu.14912](https://doi.org/10.1111/medu.14912).
- Jung H, Jeon WT, An S. 2020. Is accreditation in medical education in Korea an opportunity or a burden? *J Educ Eval Health Prof*. 17:31. doi:[10.3352/jeehp.2020.17.31](https://doi.org/10.3352/jeehp.2020.17.31).
- Prideaux D. 2007. Curriculum development in medical education: from acronyms to dynamism. *Teach Teach Educ*. 23(3):294–302. doi:[10.1016/j.tate.2006.12.017](https://doi.org/10.1016/j.tate.2006.12.017).
- Sklar D. 2018. Implementing curriculum change: choosing strategies, overcoming resistance, and embracing values. *Acad Med*. 93(10): 1417–1419. doi:[10.1097/ACM.0000000000002350](https://doi.org/10.1097/ACM.0000000000002350).
- Thomas PA, Kern DE. 2004. Internet resources for curriculum development in medical education – an annotated bibliography. *J Gen Intern Med*. 19(5 Pt 2):599–605. doi:[10.1111/j.1525-1497.2004.99999.x](https://doi.org/10.1111/j.1525-1497.2004.99999.x).