

St Patrick's Academy, Dungannon

Title:

Engineering the Curriculum – Broadening the Key Stage 4 and post-16 curriculum

Worth reading if you are interested in:

Curriculum, community involvement, working with stakeholders, employability, transition, peer mentoring and pupil voice

School context

St Patrick's Academy, Dungannon, is an 11–19 selective grammar school with an approved enrolment of 1320 pupils and a Year 8 intake of 208. The Academy attracts pupils from a wide geographical area, including Cookstown, Moy and Portadown. The vast majority of pupils remain in the school for seven years. The retention rate after GCSE is very high (97 percent). This reflects the range of courses and curriculum available, the extracurricular opportunities, the strong pastoral support and the ethos of the school. Most pupils progress to higher education, although that number has reduced recently as more pupils look to apprenticeship schemes, foundation degrees at South West College or take gap years.

Personnel:

Fintan Donnelly, Principal
Michael Fahey, Vice Principal

Background

It is the policy of St Patrick's Academy to anticipate future educational developments and to continually strive to find innovative ways to meet the changing curricular needs of young people in the area whilst preserving the values and integrity of the school.

The Academy designs a broad, balanced and flexible curriculum every year. This curriculum aims to satisfy and exceed the requirements of the Northern Ireland Curriculum, maximising opportunities for the greatest number of pupils.

The Key Stage 3 curriculum is an engaging and challenging programme based on prior learning. It lays a foundation of skills and competencies for the next phase of education. The Academy reformed subject options at Key Stage 4 in 2017–18 to provide greater choice and flexibility. Since then the school tries to keep open as many career paths as possible for all pupils.

Subject options at Post-16 are designed to:

- ensure that the subject requirements of all third level courses are met;
- reflect pupil demand; and
- provide opportunities for each pupil to develop the skills and attributes needed to contribute fully to society.

What the school sets out to do and why

In 2017, after widespread consultation and surveys with pupils, parents, staff and governors, the school abandoned its set options blocks and started afresh with an open choice for pupils. It offers 25 subjects at GCSE and 27 at A level, with an additional eight Applied A Levels and BTEC courses.¹ Although the traditional academic pathway into engineering for A Level Mathematics and Physics was popular, the school felt that a more direct route would improve choice and cater for the broad range of abilities of the post-16 pupil cohort. Governors and senior leaders responded by extending the post-16 curriculum to meet the demand of local engineering and manufacturing industries. Pupils and employers value A Level Technology and BTEC Engineering as it offers complementary routes to occupations in engineering and manufacturing.

What has been achieved so far?

The school has reformed its curriculum to provide differing pathways into engineering to meet the needs of the local employment market by introducing the BTEC Engineering Award. The school works closely with the local community and attends the Mid Ulster District Council's Skills forum². The Council has developed a Skills Action Plan for 2018–21³ with the goal of improving 'linkages between education and business sectors and help address the critical skills gaps'. The school's governors and senior school leaders are aware of the shortage of engineering and manufacturing skills in the Mid Ulster area. Across Northern Ireland, the manufacturing and engineering sector has been in long-term decline as the service sector has grown. However, in the Mid Ulster area the sector still accounts for 21 percent of employment (10,740 employee jobs) and is highly productive, representing 17 percent of Northern Ireland's manufacturing (in 2015). The sector is profoundly important to the area's economy; particularly in key specialisms such as manufacturing mining and quarrying machinery and producing general and special purpose machinery. These key specialisms have links and supply chain associations with the construction and food and agri-food sectors. For instance, 40 percent of the world's mobile crushing and screening equipment is made in the Mid Ulster area.

More skilled personnel are required as the market for engineering and manufactured products grows. The Mid Ulster Council's Skills Action Plan, 2018–21, aims to create a further 2,300 jobs⁴. It also intends to enhance job opportunities and prospects, encourage workforce development and training, and help local businesses prepare for Brexit.

The school curriculum planners are excited by the launch of the Mid Ulster Manufacturing and Engineering Growth Advancement (MEGA) Network⁵, which aims to inform careers education, inspire young people into the sector, provide work experience, influence training needs, create apprenticeships, attract women into manufacturing and engineering and reduce the skills gap.

¹ <https://www.stpatricksacademy.org.uk/about-us/prospectus/>

² <https://www.midulstercouncil.org/business/skills-and-advice/mid-ulster-skills-forum>

³ <https://www.midulstercouncil.org/business/skills-and-advice/mid-ulster-skills-forum/skills-action-plan>

⁴ <https://www.agendani.com/skills-plan-looks-to-create-2300-jobs/>

⁵ <https://www.agendani.com/mid-ulster-in-mega-drive-to-address-manufacturing-skills-and-engineering/>

St Patrick's Academy, Dungannon

The school acknowledges the important role that it can play in the local economy. It analyses labour market information to provide flexible pathways into engineering and manufacturing occupations and courses.

What still needs to be done?

The school continues to review its curriculum. It is working to smooth the transition between the end of Key Stage 2 and Post-16. It appointed a new primary school co-ordinator in September 2015 and has made significant progress in improving the transition to Year 8, using projects such as:

- sixth-form pupils teaching in primary schools;
- the Soapbox Science project for primary schools;
- an engineering project with Rock Primary school; and
- literacy and numeracy workshops with Edendork, Cabragh, St Patrick's Dungannon, St Peter's Primary School, Collegeland.

The school extended this transition work to include an audit of gaps in progression and continuity. It also adopted some of the primary school methodologies in the classroom. Since June 2015, the school has been running the Little Linguists Programme, in conjunction with Queen's University, to develop language teaching in feeder primary schools.

The peer mentoring programme⁶ in St Patrick's Academy also smoothed transition, providing a powerful opportunity to harness the natural influence that young people have on each other. The programme takes a big brother, big sister approach where older pupils help younger pupils to learn and develop emotionally, socially and/or academically. This requires mentors to have a high level of interest and empathy and a genuine desire to help younger pupils raise their overall performance in and enjoyment of a specific subject. The mentoring programme therefore boosts self-confidence and creates a positive experience for both mentor and mentee.

The school is acutely aware of its aim to provide a broad and balanced curriculum. It offers a one-hour timetabled slot each week to enable all sixth-form pupils to take part in at least one enrichment programme. There are 38 courses ranging from Astronomy to Young Enterprise, from the Current Affairs society to the Nutrition Action group. Pupils have established the Playing Our Part (POP) group, which promotes active citizenship both in our school and in wider communities. Involvement in this extra-curriculum activity not only helps to develop the pupils as positive contributors to society, but also promotes developing team-building, organisational and co-operative skills. The most recent award-winning project looked at ways to promote diversity in the local community.

Maintaining a broad and balanced curriculum presents the school leaders with a challenge, particularly in times of financial constraint. However, along with the Board of Governors, school leaders intend to widen choice through collaborative ventures with neighbouring schools and the South West College.

⁶ <https://www.stpatricksacademy.org.uk/key-information/publications/> BoG Annual Report 2018

What can the project share with other schools and providers?

St Patrick's Academy has experience of holding consultative processes with pupils and parents to provide a flexible and relevant curricular offering by seeking their views and opinions. Based on information and feedback received, the school has revised the curriculum to meet pupils' needs. It recognises current labour market information gathered from active participation in the Skills Forum for the Mid Ulster area. Acquisition of wider skills is a central tenet of the school's curricular philosophy. This is evident in the extensive extracurricular programme it provides and the range of in-house and collaborative courses with other providers.

Key Learning points:

1. St Patrick's Academy builds its Key Stage 4 annual timetable on giving pupils an unrestricted subject choice.
2. Its philosophy of providing a broad, balanced and flexible curriculum is reflected in its introduction of applied and vocation courses to complement its academic pathway. This meets the needs of pupils and helps to fulfil their career aspirations.
3. CEIAG and employability is central to helping pupils to make informed decisions based on impartial advice, giving them opportunities to experience the world of work and divergent career paths that lead to increased skills acquisition. By providing an extensive extracurricular programme, the school underpins the formal curriculum with opportunities to acquire the soft skills of team-building, communication, problem-solving, self-management and working with others. This is how the school implants the Thinking Skills and Personal Capabilities⁷ (TS&PC) into pupils' school-based learning experiences. Soft skills are centrally important for human capital development⁸ and workforce success. A growing evidence base shows that these qualities rival academic or technical skills in their ability to predict employment and salaries, among other outcomes. As the workplace has modernised the demand for such skills has increased over the past 20 years. Nevertheless, many employers note a soft skills gap where job applicants lack the soft skills needed to fill available positions.
4. In St Patrick's there are strong links providing curricular continuity and progression across the key stages, giving pupils pathways to maintain flexible career options and aspirations.
5. Strong relationships and membership of economic fora in the Mid Ulster area help to inform the school's curriculum. A synergetic approach pays dividends for pupils, local employers and the community.
6. Good curriculum design depends on asking for stakeholders' views and working closely with other providers, further and higher education institutions, local employers and business. In St Patrick's case, the Mid Ulster Council's innovative work of in economic generation and planning. It has also provided a platform for considering appropriate curricular redesign and, in keeping with the OECD's view⁹ that the school curriculum should be designed around pupils to motivate them and recognise their prior knowledge, skills, attitudes and values, the Academy has embraced pathway building that meets the aspirations of pupils and parents.

⁷ http://www.nicurriculum.org.uk/curriculum_microsite/TS&PC/what_are_ts&pc/index.asp

⁸ Lippmann LH, Ryberg R, Carney R, Moore KA. *Workforce Connections. Key "Soft Skills" that Foster Youth Workforce Success: Towards a Consensus across Fields* (June 2015) Child Trends, Washington DC.
<https://www.childtrends.org/wp-content/uploads/2015/06/2015-24WFCS&PCSoftSkills1.pdf>

⁹ <http://www.oecd.org/education/2030-project/contact/> *The Future of Education and Skills – Education 2030*, OECD